

# ***Hispanic Births in Massachusetts 1996-1999***

## ***Volume II: Selected City and Town Data***

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## Technical Foreword

### Focus of this report

This is a report about Hispanic births in Massachusetts, including all births from 1996-1999 to women residing in Massachusetts who identified their ancestry on the birth certificate as one of the following: ***Puerto Rican, Dominican, Mexican, Cuban, Colombian, Salvadoran, Other Central American, Other South American, or Other Hispanic.*** Volume I contains graphs, tables and accompanying narrative, which highlight the key findings at the state level. Volume II contains data for Massachusetts cities and towns with more than 200 Hispanic births over the four-year period. The comparison group for these analyses is White non-Hispanic mothers. Note that the ethnicity of an infant is based upon the self-reported ethnicity of the infant's mother. The use of the term "Hispanic" was chosen to be consistent with statistics on ethnicity compiled by the federal government and other government agencies.

The purpose of this report is to provide data describing characteristics of births to Hispanic mothers in Massachusetts. It is not within the scope of this report to provide more complex analyses of birth outcomes among women of Hispanic ancestries. As such, this report does not provide measures of statistical significance. Rather, this report presents important baseline data on perinatal health outcomes of Hispanic mothers and infants in Massachusetts for 1996-1999.

The first edition of the report "Hispanic Births in Massachusetts", published in 1989, covered 18 months of birth data from July, 1986 to December, 1987. "Volume I: Facts and Figures" presented state-level data, and "Volume II: City Data Book" presented data for the 10 largest Hispanic communities. Since the late 1980s, the number of annual births among all Hispanic ancestries has increased considerably in Massachusetts, from approximately 5,430 in 1987 to 8,815 in 1999.

The *Hispanic Births Report Task Force*, comprising representatives from the community of Hispanic health service providers and researchers, considered options for which ancestry groups to include for the report that would provide the maximum amount of information for program planners, community advocates and policy makers throughout the Commonwealth. We have used data for all subgroups where there were an adequate number of births to support the analysis. We have combined categories on some city tables, creating a Central American category (Salvadoran plus Other Central American) and including smaller subgroups in the Other Hispanic category. In addition, the Task Force recommended providing analysis by mother's birthplace and combining the mother's language preference and mother's birthplace variables to construct a crude acculturation measure.

The three categories presented for mother's birthplace are: U.S., Puerto Rico & U.S. Territories, and Non-U.S. Mothers born in Puerto Rico and U.S. Territories are U.S. citizens, and as citizens, once in the continental U.S., have access to the full range of programs available to U.S.-born individuals. Chapter 7 further explores differences in

birth outcomes between categories of mothers defined by their birthplace and language preference among Puerto Rican, Dominican, Central American, South American and Other Hispanic mothers. In this chapter only, birthplace categories were limited to continental U.S.-born and non-continental U.S.-born because of the small numbers of Puerto Rican mothers born outside the U.S. and Puerto Rico, and the small numbers within other Hispanic groups born in U.S. Territories. In the case of Puerto Rican mothers, we were interested in comparing mothers born in Puerto Rico (51%) to mothers born in the Continental U.S. (48%). Although Puerto Rico and other U.S. Territories are part of the United States and people born there are U.S. citizens, the socio-economic and cultural experience of people born in Puerto Rico and other U.S. Territories are very different from the experience of people born in the continental U.S. Furthermore, these different experiences are associated with differentials in perinatal outcomes.

NOTE: For the purpose of this report, the term "Continental U.S.-born" and "Mainland U.S.-born" are interchangeable. The term "Continental US-born" is more consistent with other published materials and includes women born in all 50 States and the District of Columbia.

### **Changes in birth data**

In 1996, Massachusetts implemented a major revision to the birth certificate form and installed a new Electronic Birth Certificate (EBC) system in Massachusetts maternity hospitals. As a result, beginning with 1996 birth data, there is new information that was previously not available (such as the mother's language preference) as well as greater specificity in some of the data elements which more correctly reflects the populations under study. However, the transition to the new format affected several data elements, and not all data elements presented in this report can be compared precisely with previously published data. *Hispanic Births in Massachusetts: 1996-1999* presents, as closely as possible, natality data in a form that is consistent with data from 1995 and previous years. Changes reflected in the calculation of the Kessner Adequacy of Prenatal Care Index make comparison of data for prenatal care presented in this report to data prior to 1996 inappropriate. Other data items are comparable over time, but may be affected by minor changes in data collection, recording, and coding.

### **Notes on Data Sources**

All of the information on Massachusetts births contained in this report is based upon data from the Massachusetts certificate of live birth. This report provides data on the 9 detailed Hispanic ancestry groups, which mothers select themselves on their infants' birth certificates.

There are a few limitations to using 1990 and 2000 census data. Although the 1990 census data are the most recent data currently available for age, education and socioeconomic status, they do not reflect changes in the population during the past 10

years. Second, there are known inaccuracies in census counts, including for Hispanics. The net undercount is one measure of this inaccuracy. There are two approaches to measuring the undercount<sup>1</sup>. One method uses birth and death records, immigration records and previous censuses to estimate the true population. This estimate is compared to the census count to measure the difference. The Census Bureau also conducts special surveys to measure the undercount. A scientific sample of census blocks are re-interviewed independently of the census enumeration. The results of these interviews are checked against the census records on an individual basis to see who was missed and who was counted in error. However, underlying the steady improvement in the national average undercount is a persistent differential undercount for Hispanic Americans, Native Americans, Blacks, and Asian and Pacific Islanders. These groups tend to be undercounted more than White non-Hispanics due to social and geographic factors. The Census Bureau estimated the 1990 net undercount in Massachusetts to be 0.5% but there were significant differences among minority groups. It was estimated that the undercount of Hispanics in Massachusetts was 5.5%, while Whites were overcounted by 0.1%. Information on the estimated 2000 net undercount in Massachusetts was not available when this report was released.

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1. *1993 Research Conference on Undercounted Ethnic Populations*. U.S. Bureau of the Census web page, <http://www.census.gov/dmd/www/pdf/understate.pdf>.

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## CITY AND TOWN TABLES

**Notes:**

1. Includes cities and towns with 200 or more Hispanic births from 1996-1999.
2. Ethnicities groups included for each community table are those with > 80 births, 1996 to 1999.

**Table B1.1 Mother's Demographic Characteristics by Ethnicity: Boston 1996-1999.**

	Puerto Rican		Dominican		Mexican		Colombian		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	1,926	100	1,686	100	214	100	286	100	10,894	100
Mother's birthplace										
United States	823	42.8	108	6.4	36	16.8	11	3.9	8,963	82.4
Puerto Rico & U.S. Territories	1,063	55.2	8	0.5	0	0.0	2	-- <sup>1</sup>	10	0.1
Non - U.S. <sup>2</sup>	39	2.0	1,569	93.1	178	83.2	272	95.4	1,902	17.5
Age, in years										
<18	221	11.5	74	4.4	3	-- <sup>1</sup>	3	-- <sup>1</sup>	128	1.2
18-19	240	12.5	127	7.5	11	5.1	6	2.1	299	2.7
20-24	557	28.9	457	27.1	58	27.1	56	19.6	1,184	10.9
25-29	478	24.8	470	27.9	82	38.3	77	26.9	2,840	26.1
30-34	305	15.8	375	22.2	35	16.4	84	29.4	3,929	36.1
35-39	102	5.3	157	9.3	21	9.8	50	17.5	2,044	18.8
40+	23	1.2	26	1.5	4	-- <sup>1</sup>	10	3.5	470	4.3
Education completed <sup>3</sup>										
less than high school	387	26.5	385	26.1	66	33.2	69	25.1	462	4.4
high school	609	41.7	670	45.5	64	32.2	116	42.2	2,444	23.4
some college	345	23.6	293	19.9	23	11.6	54	19.6	2,403	23.0
college graduate	87	6.0	92	6.2	29	14.6	27	9.8	3,072	29.4
more than college	32	2.2	34	2.3	17	8.5	9	3.3	2,073	19.8
Marital status										
married	547	28.4	659	39.1	160	74.8	190	66.4	8,555	78.5
not married	1,379	71.6	1,027	60.9	54	25.2	96	33.6	2,337	21.5
Race										
White	94	4.9	39	2.3	34	15.9	44	15.4	10,894	100.0
Black	20	1.0	47	2.8	0	0.0	0	0.0	0	0.0
Asian or American Indian	3	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0
Other	1,805	93.9	1,600	94.9	179	83.6	240	83.9	0	0.0
Language preference										
English	1,058	55.7	332	20.1	68	31.9	56	19.8	10,213	94.7
Spanish	819	43.2	1,307	79.1	141	66.2	223	78.8	24	0.2
Portugese	1	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0	188	1.7
Other	20	1.1	14	0.8	4	-- <sup>1</sup>	4	-- <sup>1</sup>	361	3.3

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.

<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



**Table B1.1 (continued) Mother's Demographic Characteristics by Ethnicity: Boston 1996-1999.**

	Salvadoran		Other Central American		Other South American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	841	100	644	100	286	100	798	100	10,894	100
Mother's birthplace										
United States	12	1.4	54	8.4	18	6.3	624	78.3	8,963	82.4
Puerto Rico & U.S. Territories	0	0.0	0	0.0	1	-- <sup>1</sup>	8	1.0	10	0.1
Non - U.S. <sup>2</sup>	827	98.6	590	91.6	266	93.3	165	20.7	1,902	17.5
Age, in years										
<18	23	2.7	29	4.5	5	1.7	86	10.8	128	1.2
18-19	66	7.8	34	5.3	5	1.7	134	16.8	299	2.7
20-24	301	35.8	174	27.0	50	17.5	237	29.7	1,184	10.9
25-29	236	28.1	176	27.3	101	35.3	192	24.1	2,840	26.1
30-34	166	19.7	131	20.3	67	23.4	98	12.3	3,929	36.1
35-39	40	4.8	82	12.7	47	16.4	44	5.5	2,044	18.8
40+	9	1.1	18	2.8	11	3.8	7	0.9	470	4.3
Education completed <sup>3</sup>										
less than high school	501	67.4	189	32.6	23	8.3	149	25.9	462	4.4
high school	152	20.5	218	37.7	94	34.1	212	36.8	2,444	23.4
some college	63	8.5	106	18.3	81	29.3	159	27.6	2,403	23.0
college graduate	25	3.4	49	8.5	48	17.4	34	5.9	3,072	29.4
more than college	2	-- <sup>1</sup>	17	2.9	30	10.9	22	3.8	2,073	19.8
Marital status										
married	365	43.4	322	50.0	214	74.8	265	33.2	8,555	78.5
not married	476	56.6	322	50.0	72	25.2	533	66.8	2,337	21.5
Race										
White	100	11.9	46	7.1	62	21.7	39	4.9	10,894	100.0
Black	1	-- <sup>1</sup>	53	8.2	19	6.6	17	2.1	0	0.0
Asian or American Indian	2	-- <sup>1</sup>	0	0.0	6	2.1	3	-- <sup>1</sup>	0	0.0
Other	736	87.7	545	84.6	199	69.6	738	92.6	0	0.0
Language preference										
English	100	12.0	191	29.8	109	38.5	392	50.1	10,213	94.7
Spanish	732	87.8	443	69.0	148	52.3	370	47.3	24	0.2
Portuguese	0	0.0	1	-- <sup>1</sup>	22	7.8	3	-- <sup>1</sup>	188	1.7
Other	2	-- <sup>1</sup>	7	1.1	4	-- <sup>1</sup>	17	2.2	361	3.3

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.

<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B1.2 Maternal Risk Factors by Ethnicity: Boston 1996-1999.**

	Puerto Rican		Dominican		Mexican		Colombian		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	1,926	100	1,686	100	214	100	286	100	10,894	100
Parity										
1	739	38.4	666	39.5	108	50.5	133	46.5	5,932	54.5
2-3	914	47.5	840	49.8	95	44.4	142	49.7	4,393	40.3
4+	273	14.2	180	10.7	11	5.1	11	3.8	569	5.2
Smoking prior to pregnancy										
yes	291	15.4	62	3.8	14	6.6	16	5.7	2,014	18.7
no	1,603	84.6	1,586	96.2	199	93.4	267	94.3	8,762	81.3
Smoking during pregnancy										
yes	184	9.6	38	2.3	4	-- <sup>1</sup>	3	-- <sup>1</sup>	1,290	11.9
no	1,740	90.4	1,643	97.7	210	98.1	282	98.9	9,589	88.1
Cesarean section <sup>2</sup>										
yes	319	16.6	354	21.1	30	14.0	59	20.6	2,201	20.3
no	1,597	83.4	1,320	78.9	184	86.0	227	79.4	8,662	79.7
Maternal conditions										
anemia	158	8.3	127	7.6	11	5.2	7	2.4	242	2.2
hypertension <sup>3</sup>	83	4.3	111	6.6	7	3.3	7	2.4	542	5.0
diabetes <sup>4</sup>	96	5.0	81	4.8	5	2.3	12	4.2	309	2.9
hepatitis B carrier	4	-- <sup>1</sup>	8	0.5	0	0.0	0	0.0	16	0.1
eclampsia	45	2.3	68	4.1	5	2.3	7	2.4	137	1.3
Previous preterm or small for gestational age infant										
yes	42	2.2	92	5.5	2	-- <sup>1</sup>	4	-- <sup>1</sup>	51	0.5
no	1,873	97.8	1,582	94.5	211	99.1	282	98.6	10,775	99.5

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B1.2 (continued) Maternal Risk Factors by Ethnicity: Boston 1996-1999.**

	Salvadoran		Other Central American		Other South American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	841	100	644	100	286	100	798	100	10,894	100
Parity										
1	334	39.7	255	39.6	146	51.0	361	45.2	5,932	54.5
2-3	384	45.7	323	50.2	118	41.3	360	45.1	4,393	40.3
4+	123	14.6	66	10.2	22	7.7	77	9.6	569	5.2
Smoking prior to pregnancy										
yes	9	1.1	19	3.0	19	6.6	76	9.7	2,014	18.7
no	824	98.9	624	97.0	267	93.4	705	90.3	8,762	81.3
Smoking during pregnancy										
yes	1	-- <sup>1</sup>	9	1.4	5	1.7	51	6.4	1,290	11.9
no	837	99.9	633	98.6	281	98.3	747	93.6	9,589	88.1
Cesarean section <sup>2</sup>										
yes	132	15.8	107	16.7	68	23.9	118	14.9	2,201	20.3
no	704	84.2	535	83.3	217	76.1	675	85.1	8,662	79.7
Maternal conditions										
anemia	37	4.4	22	3.4	12	4.2	55	7.0	242	2.2
hypertension <sup>3</sup>	23	2.8	34	5.3	18	6.3	54	6.8	542	5.0
diabetes <sup>4</sup>	29	3.5	36	5.6	12	4.2	28	3.5	309	2.9
hepatitis B carrier	1	-- <sup>1</sup>	2	-- <sup>1</sup>	1	-- <sup>1</sup>	4	-- <sup>1</sup>	16	0.1
eclampsia	8	1.0	10	1.6	6	2.1	28	3.5	137	1.3
Previous preterm or small for gestational age infant										
yes	9	1.1	10	1.6	3	-- <sup>1</sup>	17	2.1	51	0.5
no	826	98.9	630	98.4	282	98.9	774	97.9	10775	99.5

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B1.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Boston 1996-1999.**

	Puerto Rican		Dominican		Mexican		Colombian		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	1,926	100	1,686	100	214	100	286	100	10,894	100
Adequate prenatal care <sup>2</sup>	1,433	77.2	1,364	84.6	142	67.9	200	72.2	9,039	84.6
Payment source <sup>3</sup>										
private	486	25.8	300	18.2	91	43.1	100	35.6	8,229	76.7
public	1,378	73.1	1,327	80.6	109	51.7	175	62.9	2,300	21.4
self-paid	11	0.6	12	0.7	5	2.4	3	-- <sup>1</sup>	116	1.1
Site of care										
physician's office	331	17.4	359	21.6	45	21.3	52	18.6	5,642	52.4
hospital clinic	809	42.6	835	50.2	46	21.8	68	24.3	2,364	21.9
community health center	551	29.0	349	21.0	98	46.4	128	45.7	1,423	13.2
HMO/other	208	11.0	121	7.3	22	10.4	32	11.4	1,345	12.5
Breastfeeding <sup>4</sup>										
yes	1,262	67.8	1,368	84.9	179	84.4	248	88.6	7,756	72.4
no	598	32.2	243	15.1	33	15.6	32	11.4	2,961	27.6
Pediatric provider named										
yes	1,664	86.4	1,535	91.0	187	87.4	249	87.1	10,032	92.1
no	262	13.6	151	9.0	27	12.6	37	12.9	862	7.9

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B1.3 (continued) Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Boston 1996-1999.**

	Salvadoran		Other Central American		Other South American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	841	100	644	100	286	100	798	100	10,864	100
Adequate prenatal care <sup>2</sup>	449	55.5	463	73.1	223	79.1	669	87.0	9,039	84.8
Payment source <sup>3</sup>										
private	146	17.7	231	36.0	150	53.2	264	33.8	8,229	76.7
public	634	76.8	397	61.8	113	40.1	500	64.0	2,300	21.4
self-paid	35	4.2	7	1.1	18	6.4	12	1.5	116	1.1
Site of care										
physician's office	61	7.4	110	17.3	90	31.7	214	27.1	5,642	52.4
hospital clinic	162	19.7	220	34.5	94	33.1	354	44.8	2,364	21.9
community health center	544	66.1	253	39.7	72	25.4	107	13.5	1,423	13.2
HMO/other	56	6.8	54	8.5	28	9.9	115	14.6	1,345	12.5
Breastfeeding <sup>4</sup>										
yes	703	85.7	554	86.8	233	82.0	543	70.2	7,756	72.4
no	117	14.3	84	13.2	51	18.0	231	29.8	2,961	27.6
Pediatric provider named										
yes	717	85.3	576	89.4	256	89.5	726	91.0	10,032	92.1
no	124	14.7	68	10.6	30	10.5	72	9.0	862	7.9

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonwealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B1.4 Infant Health Characteristics by Ethnicity: Boston 1996-1999.**

	Puerto Rican		Dominican		Mexican		Colombian		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	1,926	100	1,686	100	214	100	286	100	10,894	100
Birthweight (g)										
< 1,500	36	1.9	26	1.6	3	-- <sup>1</sup>	3	-- <sup>1</sup>	107	1.0
1,500 - 2,499	139	7.2	101	6.1	7	3.3	4	-- <sup>1</sup>	582	5.4
2,500 - 3,999	1,578	82.2	1,373	82.8	184	86.0	249	87.1	8,734	80.4
4,000+	167	8.7	185	9.8	20	9.3	30	10.5	1,443	13.3
Gestational age (weeks)										
< 37	212	11.0	160	9.5	6	2.8	13	4.6	801	7.4
37-42	1,693	88.1	1,504	89.4	208	97.2	269	94.4	9,999	92.2
43+	17	0.9	18	1.1	0	0.0	3	-- <sup>1</sup>	46	0.4
Singleton birth	1,847	97.3	1,644	97.5	212	99.1	282	98.6	10,441	95.8
Multiple birth	52	2.7	42	2.5	2	-- <sup>1</sup>	4	-- <sup>1</sup>	453	4.2
Sex of infant: female	972	50.5	809	48.0	105	49.1	141	49.3	5,263	48.3
Abnormal conditions of newborn	403	20.9	387	23.0	29	13.6	42	14.7	1,300	11.9
jaundice	198	10.4	188	11.3	10	4.7	14	4.9	537	5.0

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B1.4 (continued) Infant Health Characteristics by Ethnicity: Boston 1996-1999.**

	<b>Salvadoran</b>		<b>Other Central American</b>		<b>Other South American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	841	100	644	100	286	100	798	100	10,894	100
Birthweight (g)										
< 1,500	7	0.8	6	0.9	2	-- <sup>1</sup>	15	1.9	107	1.0
1,500 - 2,499	51	6.1	40	6.2	24	8.4	67	8.4	582	5.4
2,500 - 3,999	712	84.9	540	84.0	223	78.0	641	80.5	8,734	80.4
4,000+	69	8.2	57	6.8	37	12.9	73	9.2	1,443	13.3
Gestational age (weeks)										
< 37	63	7.5	57	8.9	26	9.1	86	10.8	801	7.4
37-42	765	91.6	574	89.7	257	90.2	706	88.7	9,999	92.2
43+	7	0.8	9	1.4	2	-- <sup>1</sup>	4	-- <sup>1</sup>	46	0.4
Singleton birth	819	97.4	621	96.4	272	95.1	770	96.5	10,441	95.8
Multiple birth	22	2.6	23	3.6	14	4.9	28	3.5	453	4.2
Sex of infant: female	411	48.9	315	48.9	125	43.7	375	47.0	5,263	48.3
Abnormal conditions of newborn	149	17.7	95	14.8	50	17.5	177	22.2	1,300	11.9
jaundice	59	7.1	43	6.8	24	8.5	95	12.0	537	5.0

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B2.1 Mother's Demographic Characteristics by Ethnicity: Worcester 1996-1999.**

	Puerto Rican		Dominican		Salvadoran		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	1,731	100	145	100	130	100	223	100	5,557	100
Mother's birthplace										
United States	822	47.5	16	11.0	3	-- <sup>1</sup>	32	14.3	5,100	91.9
Puerto Rico & U.S. Territories	897	51.8	1	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	3	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	12	0.7	128	88.3	127	97.7	189	84.8	448	8.1
Age, in years										
<18	260	15.0	8	5.5	3	-- <sup>1</sup>	8	3.6	140	2.5
18-19	283	16.3	15	10.3	9	6.9	10	4.5	334	6.0
20-24	634	36.6	42	29.0	44	33.8	54	24.2	1,197	21.5
25-29	319	18.4	33	22.8	41	31.5	55	24.7	1,666	30.0
30-34	156	9.0	31	21.4	23	17.7	59	26.5	1,463	26.3
35-39	66	3.8	12	8.3	9	6.9	31	13.9	631	11.4
40+	13	0.8	4	-- <sup>1</sup>	1	-- <sup>1</sup>	6	2.7	126	2.3
Education completed <sup>3</sup>										
less than high school	420	35.4	44	36.1	50	42.4	47	23.0	461	9.1
high school	453	38.1	47	38.5	46	39.0	68	33.3	1,648	32.4
some college	262	22.1	24	19.7	18	15.3	47	23.0	1,466	28.8
college graduate	38	3.2	5	4.1	3	-- <sup>1</sup>	29	14.2	1,051	20.7
more than college	15	1.3	2	-- <sup>1</sup>	1	-- <sup>1</sup>	13	6.4	456	9.0
Marital status										
married	505	29.2	67	46.2	57	43.8	127	57.0	3,745	67.4
not married	1,226	70.8	78	53.8	73	56.2	96	43.0	1,812	32.6
Race										
White	35	2.0	4	-- <sup>1</sup>	7	5.4	42	18.8	5,557	100.0
Black	11	0.6	7	4.8	0	0.0	11	4.9	0	0.0
Asian or American Indian	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	4	-- <sup>1</sup>	0	0.0
Other	1,684	97.3	133	91.7	123	94.6	166	74.4	0	0.0
Language preference										
English	1,563	90.6	89	61.4	75	57.7	170	76.2	5,483	99.0
Spanish	161	9.3	55	37.9	55	42.3	50	22.4	4	-- <sup>1</sup>
Portuguese	0	0.0	0	0.0	0	0.0	3	-- <sup>1</sup>	10	0.2
Other	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	0	0.0	44	0.8

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



**Table B2.2 Maternal Risk Factors by Ethnicity: Worcester 1996-1999.**

	Puerto Rican		Dominican		Salvadoran		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	1,731	100	145	100	130	100	223	100	5,557	100
Parity										
1	663	38.3	62	42.8	53	40.8	103	46.2	2,417	43.5
2-3	824	47.6	71	49.0	66	50.8	107	48.0	2,673	48.1
4+	244	14.1	12	8.3	11	8.5	13	5.8	467	8.4
Smoking prior to pregnancy										
yes	335	19.4	13	9.0	2	-- <sup>1</sup>	22	9.9	1,844	33.3
no	1,391	80.6	132	91.0	128	98.5	201	90.1	3,698	66.7
Smoking during pregnancy										
yes	246	14.2	9	6.2	1	-- <sup>1</sup>	12	5.4	1,317	23.7
no	1,485	85.8	136	93.8	129	99.2	211	94.6	4,239	76.3
Cesarean section <sup>2</sup>										
yes	247	14.4	24	16.6	18	13.8	48	21.6	967	17.5
no	1,474	85.6	121	83.4	112	86.2	174	78.4	4,555	82.5
Maternal conditions										
anemia	26	1.5	1	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>	23	0.4
hypertension <sup>3</sup>	72	4.2	10	6.9	7	5.4	7	3.2	214	3.9
diabetes <sup>4</sup>	78	4.5	13	9.0	6	4.6	21	9.5	212	3.8
hepatitis B carrier	1	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0	10	0.2
eclampsia	19	1.1	1	-- <sup>1</sup>	5	3.8	6	2.7	49	0.9
Previous preterm or small for gestational age infant										
yes	25	1.5	1	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0	73	1.3
no	1,693	98.5	144	99.3	128	98.5	222	100.0	5,440	98.7

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.<sup>3</sup> Includes both chronic and pregnancy-related hypertension.<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B2.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Worcester 1996-1999.**

	<b>Puerto Rican</b>		<b>Dominican</b>		<b>Salvadoran</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	1,731	100	145	100	130	100	223	100	5,557	100
Adequate prenatal care <sup>2</sup>	1,082	62.9	86	59.3	82	63.1	136	61.3	3,979	72.1
Payment source <sup>3</sup>										
private	367	21.3	18	12.4	55	42.3	106	47.5	3,853	69.6
public	1,314	76.2	124	85.5	71	54.6	115	51.6	1,586	28.7
self-paid	20	1.2	2	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>	41	0.7
Site of care										
physician's office	400	23.3	19	13.2	21	16.2	85	38.1	3,616	65.8
hospital clinic	586	34.1	53	36.8	30	23.1	38	17.0	669	12.2
community health center	571	33.3	63	43.8	60	46.2	64	28.7	299	5.4
HMO/other	159	9.3	9	6.3	19	14.6	36	16.1	910	16.6
Breastfeeding <sup>4</sup>										
yes	1,168	67.7	126	86.9	110	84.6	193	86.5	3,365	60.8
no	558	32.3	19	13.1	20	15.4	30	13.5	2,172	39.2
Pediatric provider named										
yes	1,714	99.0	144	99.3	129	99.2	222	99.6	5,504	99.0
no	17	1.0	1	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>	53	1.0

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B2.4 Infant Health Characteristics by Ethnicity: Worcester 1996-1999.**

	<b>Puerto Rican</b>		<b>Dominican</b>		<b>Salvadoran</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	1,731	100	145	100	130	100	223	100	5,557	100
Birthweight (g)										
< 1,500	36	2.1	1	-- <sup>1</sup>	0	0.0	6	2.7	81	1.5
1,500 - 2,499	132	7.6	16	11.0	9	6.9	13	5.8	336	6.0
2,500 - 3,999	1,461	84.4	111	76.6	108	83.1	179	80.3	4,494	80.9
4,000+	102	5.9	17	1.0	13	10.0	25	11.2	643	11.6
Gestational age (weeks)										
< 37	156	9.0	11	7.6	10	7.7	17	7.6	421	7.6
37-42	1,566	90.6	134	92.4	120	92.3	206	92.4	5,113	92.2
43+	6	0.3	0	0.0	0	0.0	0	0.0	9	0.2
Singleton birth	1,695	97.9	145	100.0	120	92.3	215	96.4	5,365	96.5
Multiple birth	36	2.1	0	0.0	10	7.7	8	3.6	192	3.5
Sex of infant: female	819	47.3	60	41.4	60	46.2	102	45.7	2,684	48.3
Abnormal conditions of newborn	290	16.8	31	21.4	23	17.7	36	16.1	772	13.9
jaundice	102	6.0	9	6.2	12	9.5	16	7.2	253	4.6

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B3.1 Mother's Demographic Characteristics by Ethnicity: Chelsea 1996-1999.**

	Puerto Rican		Salvadoran		Other Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	522	100	362	100	384	100	300	100	550	100
Mother's birthplace										
United States	252	48.3	8	2.2	14	3.6	51	17.1	480	87.4
Puerto Rico & U.S. Territories	266	51.0	0	0.0	0	0.0	3	-- <sup>1</sup>	1	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	4	-- <sup>1</sup>	354	97.8	370	96.4	245	81.9	68	12.4
Age, in years										
<18	62	11.9	19	5.2	23	6.0	12	4.0	18	3.3
18-19	75	14.4	26	7.2	36	9.4	24	8.0	40	7.3
20-24	179	34.3	117	32.3	106	27.6	67	22.3	111	20.2
25-29	127	24.3	119	32.9	108	28.1	106	35.3	160	29.1
30-34	57	10.9	61	16.9	70	18.2	58	19.3	142	25.8
35-39	19	3.6	17	4.7	33	8.6	31	10.3	69	12.5
40+	3	-- <sup>1</sup>	3	-- <sup>1</sup>	8	2.1	2	-- <sup>1</sup>	10	1.8
Education completed <sup>3</sup>										
less than high school	111	29.1	216	68.8	181	57.3	77	29.6	79	16.2
high school	171	44.8	70	22.3	95	30.1	94	36.2	207	42.4
some college	89	23.3	24	7.6	30	9.5	58	22.3	126	25.8
college graduate	9	2.4	4	-- <sup>1</sup>	10	3.2	23	8.8	50	10.2
more than college	2	-- <sup>1</sup>	0	0.0	0	0.0	8	3.1	26	5.3
Marital status										
married	164	31.4	122	33.7	119	31.0	161	53.7	313	56.9
not married	358	68.6	240	66.3	265	69.0	139	46.3	237	43.1
Race										
White	33	6.3	43	11.9	29	7.6	25	8.3	550	100.0
Black	3	-- <sup>1</sup>	2	-- <sup>1</sup>	2	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0
Asian or American Indian	2	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	0	0.0	0	0.0
Other	483	92.7	316	87.5	350	91.4	274	91.3	0	0.0
Language preference										
English	355	68.1	51	14.1	48	12.5	92	30.8	513	93.3
Spanish	158	30.3	307	85.0	333	86.9	202	67.6	3	-- <sup>1</sup>
Portugese	0	0.0	0	0.0	0	0.0	1	-- <sup>1</sup>	15	2.7
Other	8	1.5	3	-- <sup>1</sup>	2	-- <sup>1</sup>	4	-- <sup>1</sup>	19	3.5

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B3.2 Maternal Risk Factors by Ethnicity: Chelsea 1996-1999.**

	Puerto Rican		Salvadoran		Other Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	522	100	362	100	384	100	300	100	550	100
Parity										
1	204	39.1	134	37.0	136	35.4	111	37.0	253	46.0
2-3	230	44.1	162	44.8	188	49.0	149	49.7	252	45.8
4+	88	16.9	66	18.2	60	15.6	40	13.3	45	8.2
Smoking prior to pregnancy										
yes	115	22.2	4	-- <sup>1</sup>	3	-- <sup>1</sup>	21	7.0	219	39.9
no	404	77.8	355	98.9	381	99.2	277	93.0	330	60.1
Smoking during pregnancy										
yes	77	14.8	4	-- <sup>1</sup>	2	-- <sup>1</sup>	9	3.0	172	31.3
no	444	85.2	356	98.9	381	99.5	289	97.0	377	68.7
Cesarean section <sup>2</sup>										
yes	85	16.4	42	11.7	58	15.2	56	18.9	117	21.3
no	434	83.6	318	88.3	323	84.8	241	81.1	432	78.7
Maternal conditions										
anemia	32	6.2	25	6.9	27	7.1	17	5.8	9	1.6
hypertension <sup>3</sup>	22	4.3	8	2.2	14	3.7	14	4.7	22	4.0
diabetes <sup>4</sup>	36	7.0	12	3.3	26	6.8	13	4.4	18	3.3
hepatitis B carrier	2	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0	2	-- <sup>1</sup>
eclampsia	7	1.4	3	-- <sup>1</sup>	8	2.1	2	-- <sup>1</sup>	4	-- <sup>1</sup>
Previous preterm or small for gestational age infant										
yes	3	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>	4	-- <sup>1</sup>
no	512	99.4	358	99.4	382	100.0	294	99.7	542	99.3

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.<sup>3</sup> Includes both chronic and pregnancy-related hypertension.<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B3.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Chelsea 1996-1999.**

	Puerto Rican		Salvadoran		Other Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	522	100	362	100	384	100	300	100	550	100
Adequate prenatal care <sup>2</sup>	359	70.1	198	56.6	237	62.7	198	68.0	392	72.6
Payment source <sup>3</sup>										
private	164	31.9	67	18.7	80	20.9	100	33.9	307	56.2
public	330	64.2	265	74.0	273	71.5	184	62.4	222	40.7
self-paid	11	2.1	14	3.9	12	3.1	6	2.0	10	1.8
Site of care										
physician's office	94	18.3	25	7.1	26	6.9	50	16.8	252	46.3
hospital clinic	96	18.6	64	18.1	52	13.7	63	21.1	113	20.8
community health center	309	60.0	260	73.4	285	75.2	159	53.4	141	25.9
HMO/other	16	3.1	5	1.4	16	4.2	26	8.7	38	7.0
Breastfeeding <sup>4</sup>										
yes	351	67.9	300	83.8	306	80.7	235	80.5	293	53.8
no	166	32.1	58	16.2	73	19.3	57	19.5	252	46.2
Pediatric provider named										
yes	479	91.8	325	89.8	346	90.1	269	89.7	508	92.4
no	43	8.2	37	10.2	38	9.9	31	10.3	42	7.6

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/PA, and other), or other private insurance

Public = Government programs including Commonwealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B3.4 Infant Health Characteristics by Ethnicity: Chelsea 1996-1999.**

	Puerto Rican		Salvadoran		Other Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	522	100	362	100	384	100	300	100	550	100
Birthweight (g)										
< 1,500	13	2.5	7	1.9	3	-- <sup>1</sup>	6	2.0	9	1.6
1,500 - 2,499	40	7.7	21	5.8	29	7.6	15	5.1	34	6.2
2,500 - 3,999	427	82.1	310	85.9	311	81.4	240	81.1	449	81.6
4,000+	40	7.7	23	4.4	39	10.2	35	11.8	58	10.5
Gestational age (weeks)										
< 37	57	10.9	26	7.2	33	8.6	26	8.8	38	7.0
37-42	463	88.9	331	91.9	346	90.6	271	91.2	502	92.6
43+	1	-- <sup>1</sup>	3	-- <sup>1</sup>	3	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>
Singleton birth	516	98.9	353	97.5	377	98.2	292	97.3	535	97.3
Multiple birth	6	1.1	9	2.5	7	1.8	8	2.7	15	2.7
Sex of infant: female	260	49.8	182	50.3	207	53.9	143	47.7	276	50.2
Abnormal conditions of newborn jaundice	41	7.9	29	8.0	31	8.1	23	7.7	36	6.5
	5	1.0	10	2.8	6	1.6	10	3.4	9	1.6

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B4.1 Mother's Demographic Characteristics by Ethnicity: Lynn 1996-1999.**

	Puerto Rican		Dominican		Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	395	100	728	100	276	100	130	100	2,589	100
Mother's birthplace										
United States	190	48.1	99	13.6	8	2.9	28	21.5	2,402	92.8
Puerto Rico & U.S. Territories	199	50.4	4	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	6	1.5	624	85.8	267	96.7	101	77.7	185	7.1
Age, in years										
<18	53	13.4	49	6.7	7	2.5	6	4.6	95	3.7
18-19	57	14.4	76	10.4	19	6.9	12	9.2	153	5.9
20-24	160	40.5	216	29.7	103	37.3	45	34.6	511	19.7
25-29	78	19.7	186	25.5	91	33.0	33	25.4	772	29.8
30-34	36	9.1	136	18.7	41	14.9	20	15.4	674	26.0
35-39	9	2.3	54	7.4	14	5.1	12	9.2	325	12.6
40+	2	-- <sup>1</sup>	11	1.5	1	-- <sup>1</sup>	2	-- <sup>1</sup>	59	2.3
Education completed <sup>3</sup>										
less than high school	111	38.9	151	25.0	175	70.0	51	45.5	191	8.2
high school	103	36.1	248	41.1	45	18.0	25	22.3	893	38.2
some college	57	20.0	149	24.7	20	8.0	29	25.9	764	32.6
college graduate	12	4.2	46	7.6	7	2.8	6	5.4	382	16.3
more than college	2	-- <sup>1</sup>	9	1.5	3	-- <sup>1</sup>	1	-- <sup>1</sup>	110	4.7
Marital status										
married	107	27.1	252	34.6	124	44.9	58	44.6	1,628	62.9
not married	288	72.9	476	65.4	152	55.1	72	55.4	961	37.1
Race										
White	18	4.6	11	1.5	11	4.0	10	7.7	2,589	100.0
Black	4	-- <sup>1</sup>	7	1.0	4	-- <sup>1</sup>	4	-- <sup>1</sup>	0	0.0
Asian or American Indian	4	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	0	0.0
Other	369	93.4	709	97.4	261	94.6	114	87.7	0	0.0
Language preference										
English	279	70.6	278	38.2	44	15.9	47	36.7	2,519	97.6
Spanish	112	28.4	446	61.3	230	83.3	77	60.2	1	-- <sup>1</sup>
Portuguese	0	0.0	0	0.0	0	0.0	1	-- <sup>1</sup>	21	0.8
Other	4	-- <sup>1</sup>	4	-- <sup>1</sup>	2	-- <sup>1</sup>	3	-- <sup>1</sup>	41	1.6

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



**Table B4.2 Maternal Risk Factors by Ethnicity: Lynn 1996-1999.**

	Puerto Rican		Dominican		Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	395	100	728	100	276	100	130	100	2,589	100
Parity										
1	138	34.9	272	37.4	107	38.8	54	41.5	1,110	42.9
2-3	192	48.6	382	52.5	141	51.1	62	47.7	1,260	48.7
4+	65	16.5	74	10.2	28	10.1	14	10.8	219	8.5
Smoking prior to pregnancy										
yes	93	23.5	52	7.1	5	1.8	5	3.9	982	38.1
no	302	76.5	676	92.9	271	98.2	123	96.1	1,597	61.9
Smoking during pregnancy										
yes	72	18.2	31	4.3	3	-- <sup>1</sup>	1	-- <sup>1</sup>	667	25.8
no	323	81.8	697	95.7	273	98.9	129	99.2	1,919	74.2
Cesarean section <sup>2</sup>										
yes	61	15.5	153	21.0	32	11.6	15	11.5	626	24.2
no	333	84.5	574	79.0	244	88.4	115	88.5	1,961	75.8
Maternal conditions										
anemia	6	1.5	4	-- <sup>1</sup>	4	-- <sup>1</sup>	4	-- <sup>1</sup>	6	0.2
hypertension <sup>3</sup>	6	1.5	7	1.0	3	-- <sup>1</sup>	1	-- <sup>1</sup>	42	1.6
diabetes <sup>4</sup>	7	1.8	19	2.6	5	1.8	7	5.4	45	1.7
hepatitis B carrier	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	0	0.0	3	-- <sup>1</sup>
eclampsia	1	-- <sup>1</sup>	4	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>	12	0.5
Previous preterm or small for gestational age infant										
yes	3	-- <sup>1</sup>	4	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	6	0.2
no	391	99.2	722	99.4	275	99.6	130	100.0	2,575	99.8

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.<sup>3</sup> Includes both chronic and pregnancy-related hypertension.<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B4.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Lynn 1996-1999.**

	<b>Puerto Rican</b>		<b>Dominican</b>		<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	395	100	728	100	276	100	130	100	2,589	100
Adequate prenatal care <sup>2</sup>	267	67.8	505	69.6	178	64.7	92	72.4	2,024	78.8
Payment source <sup>3</sup>										
private	55	13.9	111	15.3	44	16.1	29	22.7	1,523	59.2
public	328	83.0	599	82.5	221	80.7	96	75.0	923	35.9
self-paid	2	-- <sup>1</sup>	4	-- <sup>1</sup>	4	-- <sup>1</sup>	0	0.0	9	0.3
Site of care										
physician's office	145	36.7	309	42.6	53	19.3	48	37.2	1,979	77.1
hospital clinic	55	13.9	108	14.9	41	14.9	18	14.0	240	9.3
community health center	161	40.8	259	35.7	136	49.5	53	41.1	232	9.0
HMO/other	34	8.6	50	6.9	45	16.4	10	7.8	117	4.6
Breastfeeding <sup>4</sup>										
yes	232	58.7	539	74.2	220	79.7	94	73.4	1,288	50.0
no	163	41.3	187	25.8	56	20.3	34	26.6	1,286	50.0
Pediatric provider named										
yes	386	97.7	720	98.9	271	98.2	125	96.2	2,545	98.3
no	9	2.3	8	1.1	5	1.8	5	3.8	44	1.7

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/PA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B4.4 Infant Health Characteristics by Ethnicity: Lynn 1996-1999.**

	<b>Puerto Rican</b>		<b>Dominican</b>		<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	395	100	728	100	276	100	130	100	2,589	100
Birthweight (g)										
< 1,500	7	1.8	18	2.5	1	-- <sup>1</sup>	1	-- <sup>1</sup>	32	1.2
1,500 - 2,499	26	6.6	33	4.6	16	5.8	6	4.6	147	5.7
2,500 - 3,999	342	86.6	604	83.4	236	85.8	113	86.9	2,063	79.8
4,000+	20	5.1	69	17.5	22	8.0	10	7.7	343	13.3
Gestational age (weeks)										
< 37	30	7.6	66	9.1	18	6.5	8	6.2	192	7.4
37-42	364	92.4	655	90.3	258	93.5	122	93.8	2,391	92.5
43+	0	0.0	4	-- <sup>1</sup>	0	0.0	0	0.0	2	-- <sup>1</sup>
Singleton birth	383	97.0	708	97.3	272	98.6	130	100.0	2,488	96.1
Multiple birth	12	3.0	20	2.7	4	-- <sup>1</sup>	0	0.0	101	3.9
Sex of infant: female	194	49.1	356	48.9	129	46.7	67	51.5	1,269	49.0
Abnormal conditions of newborn	29	7.3	30	4.1	11	4.0	3	-- <sup>1</sup>	111	4.3
jaundice	4	-- <sup>1</sup>	8	1.1	2	-- <sup>1</sup>	1	-- <sup>1</sup>	26	1.0

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B5.1 Mother's Demographic Characteristics by Ethnicity: Lawrence 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	1,772	100	1,719	100	205	100	1,348	100
Mother's birthplace								
United States	794	44.8	227	13.2	49	23.9	1,265	93.8
Puerto Rico & U.S. Territories	929	52.4	16	0.9	2	-- <sup>1</sup>	4	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	49	2.8	1,476	85.9	154	75.1	79	5.9
Age, in years								
<18	284	16.0	110	6.4	9	4.4	56	4.2
18-19	312	17.6	193	11.2	21	10.2	122	9.1
20-24	648	36.6	545	31.7	71	34.6	374	27.7
25-29	325	18.3	469	27.3	62	30.2	405	30.0
30-34	154	8.7	283	16.5	24	11.7	271	20.1
35-39	43	2.4	98	5.7	18	8.8	98	7.3
40+	6	0.3	21	1.2	0	0.0	22	1.6
Education completed <sup>3</sup>								
less than high school	432	36.8	419	29.6	52	29.7	168	14.4
high school	501	42.7	583	41.2	64	36.6	518	44.4
some college	217	18.5	320	22.6	47	26.9	336	28.8
college graduate	16	1.4	79	5.6	10	5.7	110	9.4
more than college	7	0.6	14	1.0	2	-- <sup>1</sup>	34	2.9
Marital status								
married	405	22.9	676	39.3	96	46.8	735	54.5
not married	1,367	77.1	1,043	60.7	109	53.2	613	45.5
Race								
White	46	2.6	12	0.7	10	4.9	1,348	100.0
Black	12	0.7	8	0.5	0	0.0	0	0.0
Asian or American Indian	0	0.0	0	0.0	2	-- <sup>1</sup>	0	0.0
Other	1,714	96.7	1,699	98.8	193	94.1	0	0.0
Language preference								
English	1,116	63.0	557	32.4	80	39.0	1,326	98.7
Spanish	648	36.6	1,158	67.4	125	61.0	1	-- <sup>1</sup>
Portuguese	2	-- <sup>1</sup>	0	0.0	0	0.0	6	0.4
Other	6	0.3	2	-- <sup>1</sup>	0	0.0	11	0.8

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.

<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B5.2 Maternal Risk Factors by Ethnicity: Lawrence 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	1,772	100	1,719	100	205	100	1,348	100
Parity								
1	732	41.3	706	41.1	86	42.0	567	42.1
2-3	802	45.3	893	51.9	98	47.8	668	49.6
4+	238	13.4	120	7.0	21	10.2	113	8.4
Smoking prior to pregnancy								
yes	288	16.3	72	4.2	18	8.8	513	38.2
no	1,482	83.7	1,645	95.8	187	91.2	831	61.8
Smoking during pregnancy								
yes	195	11.0	33	1.9	11	5.4	359	26.6
no	1,574	89.0	1,685	98.1	194	94.6	989	73.4
Cesarean section <sup>2</sup>								
yes	271	15.3	360	20.9	34	16.6	291	21.6
no	1,501	84.7	1,359	79.1	171	83.4	1,055	78.4
Maternal conditions								
anemia	98	5.5	77	4.5	10	4.9	30	2.2
hypertension <sup>3</sup>	56	3.2	56	3.3	2	-- <sup>1</sup>	50	3.7
diabetes <sup>4</sup>	45	2.5	33	1.9	2	-- <sup>1</sup>	28	2.1
hepatitis B carrier	3	-- <sup>1</sup>	7	0.4	0	0.0	1	-- <sup>1</sup>
eclampsia	13	0.7	14	0.8	2	-- <sup>1</sup>	10	0.7
Previous preterm or small for gestational age infant								
yes	11	0.6	3	-- <sup>1</sup>	2	-- <sup>1</sup>	10	0.7
no	1,760	99.4	1,715	99.8	203	99.0	1,336	99.3

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B5.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Lawrence 1996-1999.**

	<b>Puerto Rican</b>		<b>Dominican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	1,772	100	1,719	100	205	100	1,348	100
Adequate prenatal care <sup>2</sup>	871	50.0	897	52.5	110	54.7	859	65.0
Payment source <sup>3</sup>								
private	337	19.0	393	22.9	61	29.9	731	54.8
public	1,353	76.4	1,258	73.3	132	64.7	533	39.9
self-paid	58	3.3	44	2.6	5	2.5	27	2.0
Site of care								
physician's office	431	24.6	435	25.6	70	34.5	892	67.4
hospital clinic	348	19.9	358	21.1	37	18.2	222	16.8
community health center	855	48.8	813	47.8	85	41.9	155	11.7
HMO/other	119	6.8	94	5.5	11	5.4	54	4.1
Breastfeeding <sup>4</sup>								
yes	1,167	65.9	1,448	84.3	165	80.9	697	52.2
no	605	34.1	270	15.7	39	19.1	638	47.8
Pediatric provider named								
yes	1,472	98.0	1,690	98.3	202	98.5	1,330	98.7
no	30	2.0	29	1.7	3	-- <sup>1</sup>	18	1.3

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B5.4 Infant Health Characteristics by Ethnicity: Lawrence 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	1,772	100	1,719	100	205	100	1,348	100
Birthweight (g)								
< 1,500	35	2.0	29	1.7	2	-- <sup>1</sup>	24	1.8
1,500 - 2,499	118	6.7	88	5.1	6	2.9	70	5.2
2,500 - 3,999	1,505	85.0	1,430	83.3	180	87.8	1,103	81.9
4,000+	112	6.3	169	9.5	17	8.3	150	11.1
Gestational age (weeks)								
< 37	176	10.0	121	7.1	10	4.9	98	7.3
37-42	1,586	89.8	1,591	92.7	194	95.1	1,242	92.3
43+	5	0.3	4	-- <sup>1</sup>	0	0.0	5	0.4
Singleton birth	1,734	97.9	1,680	97.7	202	98.5	1,312	97.3
Multiple birth	38	2.1	39	2.3	3	-- <sup>1</sup>	36	2.7
Sex of infant: female	875	49.4	809	47.1	108	52.7	678	50.3
Abnormal conditions of newborn jaundice	492	27.8	475	27.6	43	21.0	232	17.2
	108	6.1	134	7.8	11	5.4	45	3.3

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B6.1 Mother's Demographic Characteristics by Ethnicity: Lowell 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	959	100	127	100	165	100	3,501	100
Mother's birthplace								
United States	439	45.8	14	11.0	29	17.7	3,269	93.9
Puerto Rico & U.S. Territories	511	53.3	0	0.0	0	0.0	2	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	8	0.8	113	89.0	135	82.3	211	6.1
Age, in years								
<18	146	15.2	11	8.7	5	3.0	111	3.2
18-19	149	15.5	14	11.0	17	10.3	241	6.9
20-24	351	36.6	44	34.6	41	24.8	855	24.4
25-29	210	21.9	39	30.7	30	18.2	1,152	32.9
30-34	69	7.2	12	9.4	50	30.3	780	22.3
35-39	30	3.1	7	5.5	13	7.9	301	8.6
40+	4	-- <sup>1</sup>	0	0.0	9	5.5	61	1.7
Education completed <sup>3</sup>								
less than high school	230	34.7	43	42.2	38	26.6	380	12.1
high school	276	41.6	38	37.3	56	39.2	1,234	39.3
some college	129	19.5	13	12.7	25	17.5	950	30.2
college graduate	24	3.6	7	6.9	20	14.0	448	14.3
more than college	4	-- <sup>1</sup>	1	-- <sup>1</sup>	4	-- <sup>1</sup>	130	4.1
Marital status								
married	218	22.7	32	25.2	93	56.7	2,099	60.0
not married	741	77.3	95	74.8	71	43.3	1,401	40.0
Race								
White	27	2.8	2	-- <sup>1</sup>	28	17.0	3,501	100.0
Black	3	-- <sup>1</sup>	3	-- <sup>1</sup>	4	-- <sup>1</sup>	0	0.0
Asian or American Indian	3	-- <sup>1</sup>	2	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0
Other	926	96.6	120	94.5	131	79.4	0	0.0
Language preference								
English	497	51.8	17	13.4	49	29.7	3,387	97.0
Spanish	451	47.0	109	85.8	109	66.1	3	-- <sup>1</sup>
Portuguese	0	0.0	0	0.0	4	-- <sup>1</sup>	75	2.1
Other	11	1.1	1	-- <sup>1</sup>	3	-- <sup>1</sup>	26	0.7

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



**Table B6.2 Maternal Risk Factors by Ethnicity: Lowell 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	959	100	127	100	165	100	3,501	100
Parity								
1	367	38.3	43	33.9	70	42.4	1,547	44.2
2-3	462	48.2	69	54.3	77	46.7	1,677	47.9
4+	130	13.6	15	11.8	18	10.9	277	7.9
Smoking prior to pregnancy								
yes	212	22.1	8	6.3	16	9.7	1,341	38.5
no	747	77.9	118	93.7	149	90.3	2,145	61.5
Smoking during pregnancy								
yes	150	15.6	6	4.8	8	4.8	902	25.8
no	809	84.4	120	95.2	157	95.2	2,593	74.2
Cesarean section <sup>2</sup>								
yes	166	17.3	25	19.7	32	19.5	720	20.6
no	792	82.7	102	80.3	132	80.5	2,780	79.4
Maternal conditions								
anemia	17	1.8	1	-- <sup>1</sup>	3	-- <sup>1</sup>	43	1.2
hypertension <sup>3</sup>	19	2.0	1	-- <sup>1</sup>	3	-- <sup>1</sup>	155	4.4
diabetes <sup>4</sup>	21	2.2	4	-- <sup>1</sup>	6	3.7	107	3.1
hepatitis B carrier	2	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	3	-- <sup>1</sup>
eclampsia	2	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	11	0.3
Previous preterm or small for gestational age infant								
yes	7	0.7	0	0.0	1	-- <sup>1</sup>	42	1.2
no	951	99.3	127	100.0	163	99.4	3,456	98.8

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B6.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Lowell 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	959	100	127	100	165	100	3,501	100
Adequate prenatal care <sup>2</sup>	586	61.6	62	48.8	103	62.8	2,450	70.5
Payment source <sup>3</sup>								
private	152	15.8	13	10.2	67	40.9	2,086	60.3
public	800	83.4	114	89.8	95	57.9	1,326	38.3
self-paid	2	--	0	0.0	1	-- <sup>1</sup>	16	0.5
Site of care								
physician's office	507	53.0	46	36.2	90	54.9	2,447	71.1
hospital clinic	395	41.3	72	56.7	60	36.6	662	19.2
community health center	10	1.0	6	4.7	3	-- <sup>1</sup>	13	0.4
HMO/other	44	4.6	3	-- <sup>1</sup>	11	6.7	322	9.3
Breastfeeding <sup>4</sup>								
yes	466	48.7	95	74.8	121	73.8	1,721	49.7
no	491	51.3	32	25.2	43	26.2	1,739	50.3
Pediatric provider named								
yes	951	99.2	127	100.0	161	97.6	3,450	98.5
no	8	0.8	0	0.0	4	-- <sup>1</sup>	51	1.5

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B6.4 Infant Health Characteristics by Ethnicity: Lowell 1996-1999.**

	<b>Puerto Rican</b>		<b>Dominican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	959	100	127	100	165	100	3,501	100
Birthweight (g)								
< 1,500	16	1.7	0	0.0	5	3.0	53	1.5
1,500 - 2,499	70	7.3	3	-- <sup>1</sup>	8	4.9	195	5.6
2,500 - 3,999	811	84.7	112	88.2	135	82.3	2,871	82.1
4,000+	61	6.4	12	9.4	16	9.8	378	10.8
Gestational age (weeks)								
< 37	92	9.6	2	-- <sup>1</sup>	16	9.7	254	7.3
37-42	864	90.1	125	98.4	148	89.7	3,236	92.6
43+	3	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>	4	-- <sup>1</sup>
Singleton birth	930	97.0	125	98.4	161	97.6	3,395	97.0
Multiple birth	29	3.0	2	-- <sup>1</sup>	4	-- <sup>1</sup>	106	3.0
Sex of infant: female	459	47.9	59	46.5	93	56.4	1,721	49.2
Abnormal conditions of newborn	206	21.5	21	16.5	28	17.0	574	16.4
jaundice	38	4.0	4	-- <sup>1</sup>	8	4.9	111	3.2

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B7.1 Mother's Demographic Characteristics by Ethnicity: Framingham 1996-1999.**

	Puerto Rican		Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	259	100	154	100	210	100	2,598	100
Mother's birthplace								
United States	127	49.0	3	-- <sup>1</sup>	30	14.3	2,191	84.4
Puerto Rico & U.S. Territories	131	50.6	0	0.0	0	0.0	2	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	1	-- <sup>1</sup>	151	98.1	180	85.7	404	15.6
Age, in years								
<18	26	10.0	4	-- <sup>1</sup>	7	3.3	37	1.4
18-19	33	12.7	9	5.8	9	4.3	58	2.2
20-24	79	30.5	42	27.3	37	17.6	201	7.7
25-29	68	26.3	45	29.2	70	33.3	614	23.6
30-34	33	12.7	34	22.1	50	23.8	1,088	41.9
35-39	15	5.8	17	11.0	25	11.9	497	19.1
40+	5	1.9	3	-- <sup>1</sup>	12	5.7	103	4.0
Education completed <sup>3</sup>								
less than high school	42	21.0	64	45.7	36	18.6	80	3.2
high school	92	46.0	60	42.9	87	44.8	559	22.4
some college	52	26.0	5	3.6	34	17.5	544	21.8
college graduate	9	4.5	10	7.1	28	14.4	915	36.6
more than college	5	2.5	1	-- <sup>1</sup>	9	4.6	403	16.1
Marital status								
married	99	38.2	84	54.5	160	76.2	2,234	86.0
not married	160	61.8	70	45.5	50	23.8	364	14.0
Race								
White	87	33.6	61	39.6	75	35.7	2,598	100.0
Black	1	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	0	0.0
Asian or American Indian	0	0.0	0	0.0	3	-- <sup>1</sup>	0	0.0
Other	171	66.0	93	60.4	130	61.9	0	0.0
Language preference								
English	166	64.1	33	21.4	83	39.5	2,372	91.7
Spanish	92	35.5	117	76.0	88	41.9	4	-- <sup>1</sup>
Portuguese	0	0.0	3	-- <sup>1</sup>	39	18.6	179	6.9
Other	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	31	1.2

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B7.2 Maternal Risk Factors by Ethnicity: Framingham 1996-1999.**

	<b>Puerto Rican</b>		<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	259	100	154	100	210	100	2,598	100
Parity								
1	147	56.8	89	57.8	110	52.4	1,538	59.2
2-3	86	33.2	50	32.5	83	39.5	979	37.7
4+	26	10.0	15	9.7	17	8.1	81	3.1
Smoking prior to pregnancy								
yes	41	16.0	2	-- <sup>1</sup>	13	6.2	340	13.2
no	216	84.0	151	98.7	197	93.8	2,239	86.8
Smoking during pregnancy								
yes	28	10.9	0	0.0	4	-- <sup>1</sup>	184	7.1
no	229	89.1	153	100.0	206	98.1	2,408	92.9
Cesarean section <sup>2</sup>								
yes	47	18.2	32	20.8	64	30.5	597	23.0
no	211	81.8	122	79.2	146	69.5	1,996	77.0
Maternal conditions								
anemia	2	-- <sup>1</sup>	2	-- <sup>1</sup>	2	-- <sup>1</sup>	21	0.8
hypertension <sup>3</sup>	6	2.3	2	-- <sup>1</sup>	7	3.3	90	3.5
diabetes <sup>4</sup>	5	1.9	4	-- <sup>1</sup>	5	2.4	44	1.7
hepatitis B carrier	0	0.0	0	0.0	0	0.0	1	-- <sup>1</sup>
eclampsia	0	0.0	0	0.0	1	-- <sup>1</sup>	14	0.5
Previous preterm or small for gestational age infant								
yes	2	-- <sup>1</sup>	1	-- <sup>1</sup>	3	-- <sup>1</sup>	20	0.8
no	256	99.2	153	99.4	206	98.6	2,552	99.2

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B7.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Framingham 1996-1999.**

	Puerto Rican		Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	259	100	154	100	210	100	2,598	100
Adequate prenatal care <sup>2</sup>	215	83.0	125	81.2	166	80.6	2,284	88.8
Payment source <sup>3</sup>								
private	101	39.1	48	31.2	102	48.6	2,171	84.2
public	142	55.0	97	63.0	98	46.7	351	13.6
self-paid	7	2.7	8	5.2	6	2.9	16	0.6
Site of care								
physician's office	243	94.6	145	94.2	192	93.2	2,289	89.8
hospital clinic	12	4.7	7	4.5	7	3.4	83	3.3
community health center	1	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	21	0.8
HMO/other	1	-- <sup>1</sup>	2	-- <sup>1</sup>	5	2.4	155	6.1
Breastfeeding <sup>4</sup>								
yes	232	89.9	147	95.5	184	87.6	2,305	89.6
no	26	10.1	7	4.5	26	12.4	267	10.4
Pediatric provider named								
yes	255	98.5	153	99.4	203	96.7	2,524	97.2
no	4	-- <sup>1</sup>	1	-- <sup>1</sup>	7	3.3	74	2.8

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B7.4 Infant Health Characteristics by Ethnicity: Framingham 1996-1999.**

	<b>Puerto Rican</b>		<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	259	100	154	100	210	100	2,598	100
Birthweight (g)								
< 1,500	2	-- <sup>1</sup>	1	-- <sup>1</sup>	11	5.2	45	1.7
1,500 - 2,499	23	8.9	10	6.5	14	6.7	138	5.3
2,500 - 3,999	216	83.4	133	86.4	158	75.2	2,069	79.8
4,000+	18	6.9	10	3.9	27	12.9	342	13.2
Gestational age (weeks)								
< 37	19	7.3	13	8.4	23	11.0	177	6.8
37-42	238	91.9	140	90.9	186	88.6	2,407	92.7
43+	2	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>	13	0.5
Singleton birth	250	96.5	146	94.8	200	95.2	2,471	95.1
Multiple birth	9	3.5	8	5.2	10	4.8	127	4.9
Sex of infant: female	129	49.8	70	45.5	111	52.9	1,278	49.2
Abnormal conditions of newborn	4	-- <sup>1</sup>	3	-- <sup>1</sup>	13	6.2	283	10.9
jaundice	3	-- <sup>1</sup>	1	-- <sup>1</sup>	4	-- <sup>1</sup>	145	5.6

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B8.1 Mother's Demographic Characteristics by Ethnicity: Waltham 1996-1999.**

	<b>Puerto Rican</b>		<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	136	100	176	100	122	100	1,830	100
Mother's birthplace								
United States	66	48.5	3	-- <sup>1</sup>	15	12.6	1,624	89.0
Puerto Rico & U.S. Territories	65	47.8	0	0.0	0	0.0	0	0.0
Non - U.S. <sup>2</sup>	5	3.7	171	98.3	104	87.4	200	11.0
Age, in years								
<18	13	9.6	7	4.0	3	-- <sup>1</sup>	14	0.8
18-19	19	14.0	10	5.7	6	4.9	33	1.8
20-24	46	33.8	52	29.5	33	27.0	165	9.0
25-29	20	14.7	57	32.4	33	27.0	514	28.1
30-34	25	18.4	38	21.6	31	25.4	730	39.9
35-39	11	8.1	11	6.3	14	11.5	309	16.9
40+	2	-- <sup>1</sup>	1	-- <sup>1</sup>	2	-- <sup>1</sup>	65	3.6
Education completed <sup>3</sup>								
less than high school	16	15.4	87	54.7	33	29.2	43	2.4
high school	47	45.2	57	35.8	35	31.0	427	24.0
some college	30	28.8	13	8.2	24	21.2	497	27.9
college graduate	9	8.7	2	-- <sup>1</sup>	11	9.7	522	29.3
more than college	2	-- <sup>1</sup>	0	0.0	10	8.8	293	16.4
Marital status								
married	51	37.5	86	48.9	86	70.5	1,570	85.8
not married	85	62.5	90	51.1	36	29.5	260	14.2
Race								
White	5	3.7	7	4.0	20	16.4	1,830	100.0
Black	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	0	0.0
Asian or American Indian	0	0.0	0	0.0	1	-- <sup>1</sup>	0	0.0
Other	130	95.6	167	95.4	101	82.8	0	0.0
Language preference								
English	104	76.5	28	16.0	40	33.6	1,782	97.8
Spanish	31	22.8	147	84.0	77	64.7	3	-- <sup>1</sup>
Portuguese	0	0.0	0	0.0	1	-- <sup>1</sup>	6	0.3
Other	1	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>	31	1.7

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



**Table B8.2 Maternal Risk Factors by Ethnicity: Waltham 1996-1999.**

	Puerto Rican		Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	136	100	176	100	122	100	1,830	100
Parity								
1	69	50.7	72	40.9	55	45.1	967	52.8
2-3	62	45.6	84	47.7	59	48.4	792	43.3
4+	5	3.7	20	11.4	8	6.6	71	3.9
Smoking prior to pregnancy								
yes	26	19.3	2	-- <sup>1</sup>	5	4.2	329	18.1
no	109	80.7	172	98.9	113	95.8	1,489	81.9
Smoking during pregnancy								
yes	12	8.8	0	0.0	3	-- <sup>1</sup>	222	12.2
no	124	91.2	175	100.0	119	97.5	1,604	87.8
Cesarean section <sup>2</sup>								
yes	25	18.5	38	21.6	18	14.8	440	24.1
no	110	81.5	138	78.4	104	85.2	1,388	75.9
Maternal conditions								
anemia	5	3.7	4	-- <sup>1</sup>	6	5.0	33	1.8
hypertension <sup>3</sup>	1	-- <sup>1</sup>	9	5.1	5	4.1	102	5.6
diabetes <sup>4</sup>	3	-- <sup>1</sup>	6	3.4	2	-- <sup>1</sup>	57	3.2
hepatitis B carrier	0	0.0	0	0.0	0	0.0	3	-- <sup>1</sup>
eclampsia	0	0.0	0	0.0	0	0.0	13	0.7
Previous preterm or small for gestational age infant								
yes	0	0.0	6	3.4	0	0.0	9	0.5
no	135	100.0	169	96.6	121	100.0	1,797	99.5

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B8.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Waltham 1996-1999.**

	<b>Puerto Rican</b>		<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	136	100	176	100	122	100	1,830	100
Adequate prenatal care <sup>2</sup>	108	82.4	107	62.6	90	78.3	1,562	86.5
Payment source <sup>3</sup>								
private	61	45.5	49	28.0	59	50.4	1,616	89.3
public	72	53.7	121	69.1	55	47.0	177	9.8
self-paid	1	-- <sup>1</sup>	5	2.9	2	-- <sup>1</sup>	8	0.4
Site of care								
physician's office	82	62.1	52	29.9	53	43.8	1,470	82.7
hospital clinic	16	12.1	24	13.8	18	14.9	99	5.6
community health center	1	-- <sup>1</sup>	71	40.8	20	16.5	15	0.8
HMO/other	33	25.0	27	15.5	30	24.8	194	10.9
Breastfeeding <sup>4</sup>								
yes	101	74.3	160	90.9	110	93.2	1,472	81.1
no	35	25.7	16	9.1	8	6.8	343	18.9
Pediatric provider named								
yes	130	95.6	171	97.2	113	92.6	1,773	96.9
no	6	4.4	5	2.8	9	7.4	57	3.1

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B8.4 Infant Health Characteristics by Ethnicity: Waltham 1996-1999.**

	Puerto Rican		Central American		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	136	100	176	100	122	100	1,830	100
Birthweight (g)								
< 1,500	5	3.7	2	-- <sup>1</sup>	5	4.1	17	0.9
1,500 - 2,499	6	4.4	7	4.0	4	-- <sup>1</sup>	90	4.9
2,500 - 3,999	112	83.0	153	87.4	102	84.3	1,483	81.0
4,000+	12	8.9	13	9.6	10	8.3	240	13.1
Gestational age (weeks)								
< 37	10	7.5	12	6.8	8	6.6	111	6.1
37-42	123	91.8	162	92.0	112	92.6	1,704	93.3
43+	1	-- <sup>1</sup>	2	-- <sup>1</sup>	1	-- <sup>1</sup>	11	0.6
Singleton birth	132	97.1	176	100.0	116	95.1	1,756	96.0
Multiple birth	4	-- <sup>1</sup>	0	0.0	6	4.9	74	4.0
Sex of infant: female	72	52.9	88	50.0	60	49.2	906	49.5
Abnormal conditions of newborn jaundice	12	8.8	29	16.5	18	14.8	313	17.1
	6	4.5	9	5.1	10	8.3	144	8.0

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B9.1 Mother's Demographic Characteristics by Ethnicity: Methuen 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	159	100	143	100	38	100	1,765	100
Mother's birthplace								
United States	78	49.1	34	23.8	5	13.2	1,675	95.1
Puerto Rico & U.S. Territories	77	48.4	1	-- <sup>1</sup>	1	-- <sup>1</sup>	4	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	4	-- <sup>1</sup>	108	75.5	32	84.2	83	4.7
Age, in years								
<18	19	11.9	10	7.0	1	-- <sup>1</sup>	35	2.0
18-19	26	16.4	14	9.8	2	-- <sup>1</sup>	63	3.6
20-24	48	30.2	44	30.8	5	13.2	244	13.8
25-29	45	28.3	38	26.6	10	26.3	571	32.4
30-34	16	10.1	24	16.8	10	26.3	583	33.0
35-39	4	-- <sup>1</sup>	12	8.4	8	21.1	228	12.9
40+	1	-- <sup>1</sup>	1	-- <sup>1</sup>	2	-- <sup>1</sup>	41	2.3
Education completed <sup>3</sup>								
less than high school	33	28.9	30	25.2	7	20.0	60	3.6
high school	54	47.4	48	40.3	6	17.1	539	32.4
some college	21	18.4	31	26.1	13	37.1	567	34.1
college graduate	5	4.4	9	7.6	9	25.7	371	22.3
more than college	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	127	7.6
Marital status								
married	47	29.6	68	47.6	23	60.5	1,413	80.1
not married	112	70.4	75	52.4	15	39.5	351	19.9
Race								
White	7	4.4	2	-- <sup>1</sup>	7	18.4	1,765	100.0
Black	1	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0	0	0.0
Asian or American Indian	0	0.0	0	0.0	0	0.0	0	0.0
Other	151	95.0	139	97.2	31	81.6	0	0.0
Language preference								
English	109	68.6	53	37.1	24	63.2	1,733	98.6
Spanish	48	30.2	90	62.9	14	36.8	5	0.3
Portuguese	0	0.0	0	0.0	0	0.0	2	-- <sup>1</sup>
Other	2	-- <sup>1</sup>	0	0.0	0	0.0	17	1.0

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B9.2 Maternal Risk Factors by Ethnicity: Methuen 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	159	100	143	100	38	100	1,765	100
Parity								
1	65	40.9	61	42.7	12	31.6	765	43.3
2-3	74	46.5	69	48.3	22	57.9	894	50.7
4+	20	12.6	13	9.1	4	-- <sup>1</sup>	106	6.0
Smoking prior to pregnancy								
yes	20	12.6	7	4.9	7	18.4	404	23.0
no	139	87.4	136	95.1	31	81.6	1,352	77.0
Smoking during pregnancy								
yes	16	10.1	3	-- <sup>1</sup>	2	-- <sup>1</sup>	224	12.7
no	143	89.9	139	97.9	36	94.7	1,541	87.3
Cesarean section <sup>2</sup>								
yes	26	16.4	22	15.4	13	34.2	418	23.7
no	133	83.6	121	84.6	25	65.8	1,345	76.3
Maternal conditions								
anemia	6	3.8	7	4.9	3	-- <sup>1</sup>	24	1.4
hypertension <sup>3</sup>	3	-- <sup>1</sup>	4	-- <sup>1</sup>	1	-- <sup>1</sup>	53	3.0
diabetes <sup>4</sup>	3	-- <sup>1</sup>	4	-- <sup>1</sup>	2	-- <sup>1</sup>	44	2.5
hepatitis B carrier	1	-- <sup>1</sup>	0	0.0	0	0.0	1	-- <sup>1</sup>
eclampsia	1	-- <sup>1</sup>	3	-- <sup>1</sup>	1	-- <sup>1</sup>	12	0.7
Previous preterm or small for gestational age infant								
yes	1	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>	11	0.6
no	158	99.4	143	100.0	36	97.3	1,750	99.4

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B9.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Methuen 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	159	100	143	100	38	100	1,765	100
Adequate prenatal care <sup>2</sup>	93	58.9	75	53.6	29	78.4	1,370	78.9
Payment source <sup>3</sup>								
private	44	27.8	46	32.2	22	57.9	1,379	79.4
public	104	65.8	91	63.6	15	39.5	259	14.9
self-paid	4	-- <sup>1</sup>	5	3.5	0	0.0	12	0.7
Site of care								
physician's office	59	38.1	43	30.5	22	57.9	1,461	84.3
hospital clinic	44	28.4	32	22.7	6	15.8	192	11.1
community health center	47	30.3	51	36.2	6	15.8	30	1.7
HMO/other	5	3.2	15	10.6	4	-- <sup>1</sup>	50	2.9
Breastfeeding <sup>4</sup>								
yes	105	66.5	123	86.0	34	89.5	1,024	59.0
no	53	33.5	20	14.0	4	-- <sup>1</sup>	712	41.0
Pediatric provider named								
yes	157	98.7	143	100.0	38	100.0	1,719	97.4
no	2	-- <sup>1</sup>	0	0.0	0	0.0	46	2.6

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B9.4 Infant Health Characteristics by Ethnicity: Methuen 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	159	100	143	100	38	100	1,765	100
Birthweight (g)								
< 1,500	2	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	19	1.1
1,500 - 2,499	9	5.7	5	3.5	4	-- <sup>1</sup>	87	4.9
2,500 - 3,999	136	85.5	122	85.3	28	73.7	1,441	81.7
4,000+	12	7.5	16	10.1	4	-- <sup>1</sup>	216	12.3
Gestational age (weeks)								
< 37	13	8.2	8	5.6	6	15.8	110	6.3
37-42	144	90.6	132	93.0	32	84.2	1,641	93.2
43+	2	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0	9	0.5
Singleton birth	159	100.0	141	98.6	31	81.6	1,678	95.1
Multiple birth	0	0.0	2	-- <sup>1</sup>	7	18.4	87	4.9
Sex of infant: female	86	54.1	76	53.1	22	57.9	844	47.8
Abnormal conditions of newborn	36	22.6	40	28.0	7	18.4	222	12.6
jaundice	10	6.3	15	10.5	1	-- <sup>1</sup>	58	3.3

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B10.1 Mother's Demographic Characteristics by Ethnicity: Haverhill 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	164	100	131	100	74	100	3,017	100
Mother's birthplace								
United States	101	61.6	27	20.6	15	20.3	2,913	96.6
Puerto Rico & U.S. Territories	61	37.2	0	0.0	0	0.0	2	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	2	-- <sup>1</sup>	104	79.4	59	79.7	101	3.3
Age, in years								
<18	20	12.2	5	3.8	1	-- <sup>1</sup>	74	2.5
18-19	30	18.3	10	7.6	10	13.5	153	5.1
20-24	77	47.0	31	23.7	19	25.7	512	17.0
25-29	26	15.9	47	35.9	23	31.1	890	29.5
30-34	10	6.1	24	18.3	14	18.9	946	31.4
35-39	1	-- <sup>1</sup>	12	9.2	6	8.1	383	12.7
40+	0	0.0	2	-- <sup>1</sup>	1	-- <sup>1</sup>	59	2.0
Education completed <sup>3</sup>								
less than high school	27	23.7	14	12.1	23	36.5	207	7.4
high school	56	49.1	47	40.5	22	34.9	871	31.3
some college	27	23.7	37	31.9	10	15.9	891	32.0
college graduate	2	-- <sup>1</sup>	14	12.1	4	-- <sup>1</sup>	638	22.9
more than college	2	-- <sup>1</sup>	4	-- <sup>1</sup>	4	-- <sup>1</sup>	179	6.4
Marital status								
married	50	30.5	78	59.5	48	64.9	2,195	72.8
not married	114	69.5	53	40.5	26	35.1	821	27.2
Race								
White	1	-- <sup>1</sup>	2	-- <sup>1</sup>	6	8.1	3,017	100.0
Black	4	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0
Asian or American Indian	0	0.0	0	0.0	0	0.0	0	0.0
Other	159	97.0	128	97.7	67	90.5	0	0.0
Language preference								
English	148	90.2	81	62.3	50	67.6	2,992	99.5
Spanish	16	9.8	49	37.7	24	32.4	0	0.0
Portugese	0	0.0	0	0.0	0	0.0	2	-- <sup>1</sup>
Other	0	0.0	0	0.0	0	0.0	13	0.4

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.

<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



**Table B10.2 Maternal Risk Factors by Ethnicity: Haverhill 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	164	100	131	100	74	100	3,017	100
Parity								
1	73	44.5	53	40.5	28	37.8	1,291	42.8
2-3	80	48.8	68	51.9	33	44.6	1,501	49.8
4+	11	6.7	10	7.6	13	17.6	225	7.5
Smoking prior to pregnancy								
yes	36	22.0	6	4.6	9	12.2	897	29.8
no	128	78.0	124	95.4	65	87.8	2,109	70.2
Smoking during pregnancy								
yes	23	14.0	2	-- <sup>1</sup>	6	8.1	596	19.8
no	141	86.0	128	98.5	68	91.9	2,420	80.2
Cesarean section <sup>2</sup>								
yes	21	12.8	40	30.8	16	21.6	641	21.3
no	143	87.2	90	69.2	58	78.4	2,375	78.7
Maternal conditions								
anemia	1	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>	25	0.8
hypertension <sup>3</sup>	7	4.3	5	3.8	1	-- <sup>1</sup>	78	2.6
diabetes <sup>4</sup>	3	-- <sup>1</sup>	7	5.4	1	-- <sup>1</sup>	55	1.8
hepatitis B carrier	0	0.0	0	0.0	0	0.0	5	0.2
eclampsia	0	0.0	3	-- <sup>1</sup>	0	0.0	20	0.7
Previous preterm or small for gestational age infant								
yes	5	3.0	2	-- <sup>1</sup>	1	-- <sup>1</sup>	35	1.2
no	159	97.0	128	98.5	73	98.6	2,978	98.8

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B10.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Haverhill 1996-1999.**

	Puerto Rican		Dominican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	164	100	131	100	74	100	3,017	100
Adequate prenatal care <sup>2</sup>	108	66.3	81	61.8	49	66.2	2,427	80.4
Payment source <sup>3</sup>								
private	49	29.9	38	29.2	37	50.0	2,153	72.4
public	110	67.1	89	68.5	35	47.3	690	23.2
self-paid	1	-- <sup>1</sup>	3	-- <sup>1</sup>	0	0.0	18	0.6
Site of care								
physician's office	91	55.5	44	33.8	44	59.5	2,349	79.1
hospital clinic	66	40.2	69	53.1	26	35.1	509	17.1
community health center	5	3.0	12	9.2	2	-- <sup>1</sup>	20	0.7
HMO/other	2	-- <sup>1</sup>	5	3.8	2	-- <sup>1</sup>	93	3.1
Breastfeeding <sup>4</sup>								
yes	95	57.9	102	78.5	51	68.9	1,819	61.1
no	69	42.1	28	21.5	23	31.1	1,157	38.9
Pediatric provider named								
yes	164	100.0	129	98.5	72	97.3	2,968	98.4
no	0	0.0	2	-- <sup>1</sup>	2	-- <sup>1</sup>	49	1.6

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B10.4 Infant Health Characteristics by Ethnicity: Haverhill 1996-1999.**

	<b>Puerto Rican</b>		<b>Dominican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	164	100	131	100	74	100	3,017	100
Birthweight (g)								
< 1,500	0	0.0	1	-- <sup>1</sup>	1	-- <sup>1</sup>	29	1.0
1,500 - 2,499	8	4.9	9	6.9	5	6.8	172	5.7
2,500 - 3,999	147	89.6	107	81.7	58	78.4	2,378	78.9
4,000+	9	5.5	14	8.5	10	13.5	436	14.5
Gestational age (weeks)								
< 37	10	6.1	7	5.3	10	13.5	243	8.1
37-42	152	92.7	124	94.7	64	86.5	2,764	91.7
43+	2	-- <sup>1</sup>	0	0.0	0	0.0	6	0.2
Singleton birth	162	98.8	128	97.7	72	97.3	2,913	96.6
Multiple birth	2	-- <sup>1</sup>	3	-- <sup>1</sup>	2	-- <sup>1</sup>	104	3.4
Sex of infant: female	83	50.6	66	50.4	34	45.9	1,424	47.2
Abnormal conditions of newborn	13	7.9	13	9.9	5	6.8	220	7.3
jaundice	5	3.0	5	3.8	2	-- <sup>1</sup>	52	1.7

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B11.1 Mother's Demographic Characteristics by Ethnicity: Springfield and Holyoke 1996-1999.**

	<u>Springfield</u>						<u>Holyoke</u>					
	<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>		<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	3,223	100	196	100	3,400	100	1,631	100	56	100	930	100
Mother's birthplace												
United States	1,678	52.1	70	35.9	3,161	93.0	668	41.0	19	33.9	888	95.6
Puerto Rico & U.S. Territories	1,523	47.3	3	-- <sup>1</sup>	4	-- <sup>1</sup>	953	58.4	0	0.0	3	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	22	0.7	122	62.6	233	6.9	10	0.6	37	66.1	38	4.1
Age, in years												
<18	479	14.9	11	5.6	115	3.4	255	15.6	3	-- <sup>1</sup>	25	2.7
18-19	528	16.4	21	10.7	255	7.5	339	20.8	5	8.9	71	7.6
20-24	1,184	36.7	57	29.1	736	21.6	560	34.3	15	26.8	173	18.6
25-29	633	19.6	62	31.6	977	28.7	271	16.6	14	25.0	280	30.1
30-34	280	8.7	30	15.3	831	24.4	136	8.3	9	13.8	253	27.2
35-39	100	3.1	11	5.6	398	11.7	58	3.6	9	10.7	107	11.5
40+	19	0.6	4	-- <sup>1</sup>	88	2.6	12	0.7	1	-- <sup>1</sup>	21	2.3
Education completed <sup>3</sup>												
less than high school	840	38.0	51	31.1	263	8.7	454	43.8	9	18.8	78	9.4
high school	826	37.3	49	29.9	1,085	35.8	374	36.1	19	39.6	279	33.5
some college	485	21.9	51	31.1	1,038	34.3	183	17.7	14	29.2	270	32.4
college graduate	45	2.0	7	4.3	458	15.1	22	2.1	5	10.4	143	17.1
more than college	16	0.7	6	3.7	183	6.0	3	-- <sup>1</sup>	1	-- <sup>1</sup>	64	7.7
Marital status												
married	729	22.6	76	38.8	2,160	63.5	331	20.3	35	62.5	600	64.5
not married	2,491	77.4	120	61.2	1,240	36.5	1,300	79.7	21	37.5	330	35.5
Race												
White	132	4.1	31	15.8	3,400	100.0	563	34.5	13	23.2	930	100.0
Black	6	0.2	15	7.7	0	0.0	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0
Asian or American Indian	2	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0
Other	3,083	95.7	149	76.0	0	0.0	1,065	65.3	40	71.4	0	0.0
Language preference												
English	2,408	74.8	123	63.1	3,306	97.2	968	59.4	33	58.9	919	98.8
Spanish	803	24.9	72	36.9	1	-- <sup>1</sup>	660	40.5	23	41.1	2	-- <sup>1</sup>
Portuguese	3	-- <sup>1</sup>	0	0.0	4	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0
Other	7	0.2	0	0.0	89	2.6	1	-- <sup>1</sup>	0	0.0	9	1.0

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B11.2 Maternal Risk Factors by Ethnicity: Springfield and Holyoke 1996-1999.**

	<u>Springfield</u>						<u>Holyoke</u>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	3,223	100	196	100	3,400	100	1,631	100	56	100	930	100
Parity												
1	1,137	35.3	81	41.3	1,461	43.0	596	36.5	24	42.9	394	42.4
2-3	1,604	49.8	93	47.4	1,634	48.1	740	45.4	28	50.0	452	48.6
4+	482	15.0	22	11.2	305	9.0	295	18.1	4	-- <sup>1</sup>	84	9.0
Smoking prior to pregnancy												
yes	759	23.6	45	23.0	1,275	37.5	382	23.5	10	17.9	342	36.8
no	2,459	76.4	151	77.0	2,123	62.5	1,245	76.5	46	82.1	588	63.2
Smoking during pregnancy												
yes	519	16.1	19	9.7	843	24.8	288	17.7	7	12.5	222	23.9
no	2,699	83.9	177	90.3	2,555	75.2	1,340	82.3	49	87.5	708	76.1
Cesarean section <sup>2</sup>												
yes	541	16.8	38	19.4	667	19.6	263	16.1	15	26.8	196	21.1
no	2,677	83.2	158	80.6	2,729	80.4	1,367	83.9	41	73.2	734	78.9
Maternal conditions												
anemia	311	9.7	14	7.1	126	3.7	106	6.5	3	-- <sup>1</sup>	25	2.7
hypertension <sup>3</sup>	67	2.1	7	3.6	97	2.9	38	2.3	0	0.0	34	3.7
diabetes <sup>4</sup>	135	4.2	10	5.1	142	4.2	58	3.6	1	-- <sup>1</sup>	26	2.8
hepatitis B carrier	5	0.2	0	0.0	1	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0	0	0.0
eclampsia	58	1.8	6	3.1	97	2.9	15	0.9	3	-- <sup>1</sup>	15	1.6
Previous preterm or small for gestational age infant												
yes	76	2.4	3	-- <sup>1</sup>	49	1.4	25	1.5	0	0.0	11	1.2
no	3,142	97.6	193	98.5	3,342	98.6	1,599	98.5	56	100.0	916	98.8

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B11.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Springfield and Holyoke 1996-1999.**

	<u>Springfield</u>						<u>Holyoke</u>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	3,223	100	196	100	3,400	100	1,631	100	56	100	930	100
Adequate prenatal care <sup>2</sup>	1,854	57.9	107	55.2	2,572	76.3	1,064	65.8	38	67.9	719	77.7
Payment source <sup>3</sup>												
private	517	16.1	63	32.3	2,147	63.2	192	11.8	26	46.4	590	63.4
public	2,666	83.0	126	64.6	1,197	35.2	1,420	87.2	29	51.8	334	35.9
self-paid	21	0.7	6	3.1	37	1.1	14	0.9	1	-- <sup>1</sup>	4	-- <sup>1</sup>
Site of care												
physician's office	1,033	32.2	67	34.4	2,504	74.1	658	40.6	28	50.0	715	77.3
hospital clinic	2,002	62.4	114	58.5	578	17.1	620	38.3	13	23.2	82	8.9
community health center	1	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>	12	0.7	0	0.0	0	0.0
HMO/other	170	5.3	14	7.2	296	8.8	330	20.4	15	26.8	128	13.8
Breastfeeding <sup>4</sup>												
yes	1,503	46.8	137	70.3	1,947	57.4	864	53.1	47	83.9	590	63.6
no	1,707	53.2	58	29.7	1,447	42.6	762	46.9	9	16.1	338	36.4
Pediatric provider named												
yes	3,188	98.9	195	99.5	3,381	99.4	1,610	98.7	56	100.0	922	99.1
no	35	1.1	1	-- <sup>1</sup>	19	0.6	21	1.3	0	0.0	8	0.9

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

Table B11.4 Infant Health Characteristics by Ethnicity: Springfield and Holyoke 1996-1999.

	<u>Springfield</u>						<u>Holyoke</u>					
	Puerto Rican		Other Hispanic		White Non-Hispanic		Puerto Rican		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	3,223	100	196	100	3,400	100	1,631	100	56	100	930	100
Birthweight (g)												
< 1,500	76	2.4	0	0.0	42	1.2	30	1.8	1	-- <sup>1</sup>	8	0.9
1,500 - 2,499	262	8.1	11	5.6	212	6.2	111	6.8	4	-- <sup>1</sup>	48	5.2
2,500 - 3,999	2,727	84.6	161	82.1	2,712	79.8	1,392	85.5	46	82.1	737	79.2
4,000+	158	4.9	24	12.2	433	12.7	96	5.9	5	8.9	137	14.7
Gestational age (weeks)												
< 37	395	12.3	18	9.2	302	8.9	146	9.0	3	-- <sup>1</sup>	55	5.9
37-42	2,818	87.6	178	90.8	3,087	91.0	1,473	90.9	52	92.9	873	94.1
43+	4	-- <sup>1</sup>	0	0.0	5	0.1	2	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0
Singleton birth	3,152	97.8	192	98.0	3,284	96.6	1,586	97.2	54	96.4	904	97.2
Multiple birth	71	2.2	4	-- <sup>1</sup>	116	3.4	45	2.8	2	-- <sup>1</sup>	26	2.8
Sex of infant: female	1,601	49.7	102	52.0	1,689	49.7	788	48.3	30	53.6	468	50.3
Abnormal conditions of newborn jaundice	1,393	43.2	85	43.4	1,328	39.1	412	25.3	22	39.3	261	28.1
	447	13.9	27	13.8	395	11.6	129	7.9	6	10.7	82	8.8

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B12.1 Mother's Demographic Characteristics by Ethnicity: New Bedford and Somerville 1996-1999.**

	<b>New Bedford</b>						<b>Somerville</b>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Salvadoran</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	559	100	130	100	3,504	100	389	100	273	100	2,244	100
Mother's birthplace												
United States	307	54.9	25	19.2	2,809	80.2	5	1.3	78	28.6	1,612	71.9
Puerto Rico & U.S. Territories	252	45.1	0	0.0	5	0.1	0	0.0	28	10.3	1	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	0	0.0	105	80.8	690	19.7	382	98.7	167	61.2	630	28.1
Age, in years												
<18	88	15.7	8	6.2	148	4.2	16	4.1	12	2.7	58	2.6
18-19	107	19.1	11	8.5	335	9.6	36	9.3	14	3.2	67	3.0
20-24	225	40.3	46	35.4	1,044	29.8	127	32.6	59	13.4	281	12.5
25-29	80	14.3	40	30.8	1,026	29.3	109	28.0	81	29.7	623	27.8
30-34	40	7.2	19	14.6	678	19.3	76	19.5	68	24.9	755	33.6
35-39	16	2.9	6	4.6	230	6.6	21	5.4	34	12.5	366	16.3
40+	3	-- <sup>1</sup>	0	0.0	43	1.2	4	-- <sup>1</sup>	5	1.8	94	4.4
Education completed <sup>3</sup>												
less than high school	154	42.7	47	43.1	585	19.4	230	68.5	45	18.3	174	8.2
high school	134	37.1	41	37.6	1,289	42.7	78	23.2	77	31.3	614	29.0
some college	64	17.7	13	11.9	801	26.6	20	6.0	58	23.6	443	20.9
college graduate	8	2.2	6	5.5	277	9.2	7	2.1	43	17.5	441	20.8
more than college	1	-- <sup>1</sup>	2	-- <sup>1</sup>	64	2.1	1	-- <sup>1</sup>	23	9.3	446	21.1
Marital status												
married	142	25.4	39	30.0	1,989	56.8	165	42.4	163	59.7	1,715	76.4
not married	417	74.6	91	70.0	1,515	43.2	224	57.6	110	40.3	529	23.6
Race												
White	22	3.9	13	10.0	3,504	100.0	19	4.9	67	24.5	2,244	100.0
Black	3	-- <sup>1</sup>	4	-- <sup>1</sup>	0	0.0	0	0.0	2	-- <sup>1</sup>	0	0.0
Asian or American Indian	0	0.0	0	0.0	0	0.0	0	0.0	3	-- <sup>1</sup>	0	0.0
Other	534	95.5	113	86.9	0	0.0	370	95.1	201	73.6	0	0.0
Language preference												
English	414	74.1	41	31.5	3,349	95.6	30	7.8	148	54.4	1,910	85.5
Spanish	144	25.8	88	67.7	2	-- <sup>1</sup>	351	90.9	107	39.3	5	0.2
Portuguese	0	0.0	1	-- <sup>1</sup>	143	4.1	1	-- <sup>1</sup>	12	4.4	267	11.9
Other	1	-- <sup>1</sup>	0	0.0	10	0.3	4	-- <sup>1</sup>	5	1.8	53	2.4

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.

<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



Table B12.2 Maternal Risk Factors by Ethnicity: New Bedford and Somerville 1996-1999.

	New Bedford						Somerville					
	Puerto Rican		Other Hispanic		White Non-Hispanic		Salvadoran		Other Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	559	100	130	100	3,504	100	389	100	273	100	2,244	100
Parity												
1	229	41.0	49	37.7	1,627	46.4	163	41.9	132	48.4	1,310	58.4
2-3	258	46.2	65	50.0	1,639	46.8	183	47.0	123	45.1	852	38.0
4+	72	12.9	16	12.3	238	6.8	43	11.1	18	6.6	82	3.7
Smoking prior to pregnancy												
yes	156	27.9	15	11.5	1,319	37.7	7	1.8	38	14.0	460	20.6
no	403	72.1	115	88.5	2,184	62.3	378	98.2	233	86.0	1,772	79.4
Smoking during pregnancy												
yes	111	19.9	9	6.9	885	25.3	5	1.3	22	8.1	283	12.6
no	448	80.1	121	93.1	2,618	74.7	381	98.7	250	91.9	1,958	87.4
Cesarean section <sup>2</sup>												
yes	100	18.0	31	23.8	746	21.4	43	11.1	55	20.2	510	22.7
no	457	82.0	99	76.2	2,741	78.6	344	88.9	217	79.8	1,734	77.3
Maternal conditions												
anemia	9	1.6	5	3.9	28	0.8	15	3.9	9	3.3	44	2.0
hypertension <sup>3</sup>	5	0.9	5	3.9	92	2.7	11	2.8	7	2.6	98	4.4
diabetes <sup>4</sup>	18	3.2	3	-- <sup>1</sup>	141	4.1	12	3.1	6	2.2	72	3.2
hepatitis B carrier	0	0.0	0	0.0	4	-- <sup>1</sup>	1	-- <sup>1</sup>	1	-- <sup>1</sup>	3	-- <sup>1</sup>
eclampsia	3	-- <sup>1</sup>	0	0.0	7	0.2	0	0.0	2	-- <sup>1</sup>	15	0.7
Previous preterm or small for gestational age infant												
yes	12	2.2	2	-- <sup>1</sup>	44	1.3	3	-- <sup>1</sup>	7	2.6	14	0.6
no	545	97.8	127	98.4	3,423	98.7	383	99.2	265	97.4	2,226	99.4

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.<sup>3</sup> Includes both chronic and pregnancy-related hypertension.<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B12.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: New Bedford and Somerville 1996-1999.**

	<b><u>New Bedford</u></b>						<b><u>Somerville</u></b>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Salvadoran</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	559	100	130	100	3,504	100	389	100	273	100	2,244	100
Adequate prenatal care <sup>2</sup>	316	58.3	55	44.7	2,680	77.7	228	59.4	184	68.7	1,822	81.9
Payment source <sup>3</sup>												
private	57	10.2	10	7.9	1,743	49.9	112	29.0	142	52.4	1,619	72.8
public	491	88.2	104	81.9	1,627	46.6	267	69.2	126	46.5	570	25.6
self-paid	3	-- <sup>1</sup>	10	7.9	48	1.4	5	1.3	2	-- <sup>1</sup>	23	1.0
Site of care												
physician's office	546	98.9	123	96.9	3,443	99.1	27	7.0	77	28.4	1,063	47.7
hospital clinic	3	-- <sup>1</sup>	2	-- <sup>1</sup>	20	0.6	133	34.5	92	47.4	537	24.1
community health center	0	0.0	2	-- <sup>1</sup>	5	0.1	204	53.0	63	23.2	277	12.4
HMO/other	3	-- <sup>1</sup>	0	0.0	5	0.1	21	5.5	39	14.4	350	15.7
Breastfeeding <sup>4</sup>												
yes	224	40.3	88	68.8	1,269	36.4	356	92.2	240	88.6	1,670	75.0
no	332	59.7	40	31.3	2,220	63.6	30	7.8	31	11.4	557	25.0
Pediatric provider named												
yes	555	99.3	128	98.5	3,477	99.2	363	93.3	255	93.4	2,165	96.5
no	4	-- <sup>1</sup>	2	-- <sup>1</sup>	27	0.8	26	6.7	18	6.6	79	3.5

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

Table B12.4 Infant Health Characteristics by Ethnicity: New Bedford and Somerville 1996-1999.

	<u>New Bedford</u>						<u>Somerville</u>					
	<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>		<u>Salvadoran</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	559	100	130	100	3,504	100	389	100	273	100	2,244	100
Birthweight (g)												
< 1,500	1	-- <sup>1</sup>	0	0.0	11	0.3	2	-- <sup>1</sup>	3	-- <sup>1</sup>	20	0.9
1,500 - 2,499	39	7.0	6	4.7	181	5.2	29	7.5	16	5.9	105	4.7
2,500 - 3,999	478	85.7	112	87.5	2,986	85.6	333	85.6	220	80.9	1,798	80.3
4,000+	40	7.2	10	7.8	310	8.9	25	6.4	33	12.1	316	14.1
Gestational age (weeks)												
< 37	37	7.0	4	-- <sup>1</sup>	131	3.9	26	6.7	28	10.3	121	5.4
37-42	494	93.0	119	96.7	3,202	96.0	361	93.3	243	89.7	2,103	94.1
43+	0	0.0	0	0.0	1	-- <sup>1</sup>	0	0.0	0	0.0	11	0.5
Singleton birth	554	99.1	128	98.5	3,435	98.0	387	99.5	265	97.1	2,180	97.1
Multiple birth	5	0.9	2	-- <sup>1</sup>	69	2.0	2	-- <sup>1</sup>	8	2.9	64	2.9
Sex of infant: female	279	49.9	62	47.7	1,692	48.3	197	50.6	127	46.5	1,020	45.5
Abnormal conditions of newborn	60	10.7	23	17.7	343	9.8	28	7.2	21	7.7	173	7.7
jaundice	32	5.8	13	10.1	139	4.0	3	-- <sup>1</sup>	7	2.6	59	2.6

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B13.1 Mother's Demographic Characteristics by Ethnicity: Brockton and Fitchburg 1996-1999.**

	<b>Brockton</b>						<b>Fitchburg</b>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	407	100	210	100	2,835	100	396	100	86	100	1,409	100
Mother's birthplace												
United States	186	45.7	50	23.8	2,686	94.7	173	43.7	23	27.7	1,370	97.3
Puerto Rico & U.S. Territories	215	52.8	0	0.0	1	-- <sup>1</sup>	216	54.5	0	0.0	2	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	6	1.5	160	76.2	148	5.2	7	1.8	60	72.3	36	2.6
Age, in years												
<18	55	13.5	11	5.2	96	3.4	53	13.4	2	-- <sup>1</sup>	59	4.2
18-19	67	16.5	17	8.1	217	7.7	84	21.2	10	11.6	119	8.4
20-24	161	39.6	56	26.7	683	24.1	154	38.9	30	34.9	382	27.1
25-29	75	18.4	54	25.7	833	29.4	76	19.2	27	31.4	402	28.5
30-34	33	8.1	43	20.5	649	22.9	21	5.3	13	11.8	294	20.9
35-39	13	3.2	25	11.9	302	10.7	7	1.8	4	-- <sup>1</sup>	130	9.2
40+	3	-- <sup>1</sup>	4	-- <sup>1</sup>	55	1.9	1	-- <sup>1</sup>	0	0.0	23	1.7
Education completed <sup>3</sup>												
less than high school	111	38.9	38	21.1	297	11.8	112	43.2	24	32.4	138	11.2
high school	115	40.4	71	39.4	1,026	40.7	95	36.7	28	37.8	482	39.2
some college	58	20.4	55	30.6	823	32.6	47	18.1	18	24.3	371	30.1
college graduate	0	0.0	12	6.7	303	12.0	4	-- <sup>1</sup>	4	-- <sup>1</sup>	178	14.5
more than college	1	-- <sup>1</sup>	4	-- <sup>1</sup>	72	2.9	1	-- <sup>1</sup>	0	0.0	62	5.0
Marital status												
married	98	24.1	127	60.5	1,599	56.4	119	30.1	49	57.0	855	60.7
not married	309	75.9	83	39.5	1,236	43.6	277	69.9	37	43.0	554	39.3
Race												
White	30	7.4	40	19.1	2,835	100.0	27	6.8	11	12.8	1,409	100.0
Black	10	2.5	12	5.7	0	0.0	1	-- <sup>1</sup>	3	-- <sup>1</sup>	0	0.0
Asian or American Indian	0	0.0	1	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0
Other	367	90.2	156	74.6	0	0.0	366	92.4	70	81.4	0	0.0
Language preference												
English	291	71.7	108	51.4	2,784	98.3	286	72.2	46	53.5	1,402	99.6
Spanish	111	27.3	93	44.3	4	-- <sup>1</sup>	107	27.0	40	46.5	2	-- <sup>1</sup>
Portuguese	1	-- <sup>1</sup>	6	2.9	30	1.1	1	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>
Other	3	-- <sup>1</sup>	3	-- <sup>1</sup>	13	0.5	2	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B13.2 Maternal Risk Factors by Ethnicity: Brockton and Fitchburg 1996-1999.**

	<b>Brockton</b>						<b>Fitchburg</b>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	407	100	210	100	2,835	100	396	100	86	100	1,409	100
Parity												
1	164	40.3	86	41.0	1,195	42.2	145	36.6	37	43.0	551	39.1
2-3	191	46.9	104	49.5	1,375	48.5	194	49.0	41	47.7	715	50.7
4+	52	12.8	20	9.5	265	9.3	57	14.4	8	9.3	143	10.1
Smoking prior to pregnancy												
yes	77	19.0	30	14.4	1,107	39.1	94	23.7	16	18.6	542	38.5
no	329	81.0	179	85.6	1,723	60.9	302	76.3	70	81.4	864	61.5
Smoking during pregnancy												
yes	48	11.8	13	6.2	760	26.8	65	16.4	11	12.8	387	27.5
no	359	88.2	196	93.8	2,074	73.2	331	83.6	75	87.2	1,022	72.5
Cesarean section <sup>2</sup>												
yes	76	18.7	49	23.3	586	20.7	68	17.2	14	16.3	295	21.0
no	331	81.3	161	76.7	2,248	79.3	327	82.8	72	83.7	1,113	79.0
Maternal conditions												
anemia	11	2.7	3	-- <sup>1</sup>	17	0.6	17	4.3	4	-- <sup>1</sup>	19	1.4
hypertension <sup>3</sup>	7	1.7	8	3.8	85	3.0	11	2.8	1	-- <sup>1</sup>	60	4.3
diabetes <sup>4</sup>	15	3.7	11	5.2	85	3.0	8	2.0	4	-- <sup>1</sup>	33	2.4
hepatitis B carrier	0	0.0	0	0.0	3	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	3	-- <sup>1</sup>
eclampsia	4	-- <sup>1</sup>	3	-- <sup>1</sup>	17	0.6	1	-- <sup>1</sup>	0	0.0	4	-- <sup>1</sup>
Previous preterm or small for gestational age infant												
yes	7	1.7	2	-- <sup>1</sup>	31	1.1	19	4.8	4	-- <sup>1</sup>	42	3.0
no	399	98.3	208	99.0	2,799	98.9	374	95.2	82	95.3	1,361	97.0

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B13.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Brockton and Fitchburg 1996-1999.**

	<b><u>Brockton</u></b>						<b><u>Fitchburg</u></b>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	407	100	210	100	2,835	100	396	100	86	100	1,409	100
Adequate prenatal care <sup>2</sup>	228	56.4	122	58.1	2,044	72.5	257	65.4	44	51.8	1,053	75.6
Payment source <sup>3</sup>												
private	79	19.5	85	40.5	1,713	60.5	83	21.1	30	35.3	926	66.2
public	324	79.8	116	55.2	1,077	38.0	305	77.4	52	61.2	445	31.8
self-paid	3	-- <sup>1</sup>	9	4.3	26	0.9	6	1.5	2	-- <sup>1</sup>	21	1.5
Site of care												
physician's office	375	92.6	178	86.0	2,626	93.0	292	74.1	59	68.6	1,095	78.7
hospital clinic	13	3.2	15	7.2	82	2.9	14	3.6	1	-- <sup>1</sup>	32	2.3
community health center	11	2.7	8	3.9	26	0.9	4	-- <sup>1</sup>	2	-- <sup>1</sup>	12	0.9
HMO/other	6	1.5	6	2.9	89	3.2	84	21.3	24	27.9	252	18.1
Breastfeeding <sup>4</sup>												
yes	222	54.8	164	78.5	1,439	50.8	231	58.5	66	76.7	809	57.8
no	183	45.2	45	21.5	1,391	49.2	164	41.5	20	23.3	590	42.2
Pediatric provider named												
yes	401	98.5	205	97.6	2,792	98.5	394	99.5	86	100.0	1,398	99.2
no	6	1.5	5	2.4	43	1.5	2	-- <sup>1</sup>	0	0.0	11	0.8

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B13.4 Infant Health Characteristics by Ethnicity: Brockton and Fitchburg 1996-1999.**

	<u>Brockton</u>						<u>Fitchburg</u>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	407	100	210	100	2,835	100	396	100	86	100	1,409	100
Birthweight (g)												
< 1,500	8	2.0	4	-- <sup>1</sup>	34	1.2	3	-- <sup>1</sup>	0	0.0	16	1.1
1,500 - 2,499	39	9.6	18	8.6	185	6.5	28	7.1	4	-- <sup>1</sup>	95	6.8
2,500 - 3,999	340	83.5	172	81.9	2,290	80.9	347	87.6	71	82.6	1,153	81.9
4,000+	20	4.9	16	7.6	323	11.4	18	4.5	11	12.8	143	10.2
Gestational age (weeks)												
< 37	39	9.6	20	9.6	240	8.5	31	7.9	3	-- <sup>1</sup>	124	8.8
37-42	366	89.9	189	90.4	2,585	91.3	363	92.1	82	96.5	1,279	91.1
43+	2	-- <sup>1</sup>	0	0.0	6	0.2	0	0.0	0	0.0	1	-- <sup>1</sup>
Singleton birth	397	97.5	199	94.8	2,749	97.0	382	96.5	86	100.0	1,354	96.1
Multiple birth	10	2.5	11	5.2	86	3.0	14	3.5	0	0.0	55	3.9
Sex of infant: female	210	51.6	110	52.4	1,378	48.6	212	53.5	43	50.0	700	49.7
Abnormal conditions of newborn	11	2.7	13	6.2	122	4.3	20	5.1	2	-- <sup>1</sup>	92	6.5
jaundice	2	-- <sup>1</sup>	1	-- <sup>1</sup>	48	1.7	2	-- <sup>1</sup>	1	-- <sup>1</sup>	34	2.4

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B14.1 Mother's Demographic Characteristics by Ethnicity: Leominster and Chicopee 1996-1999.**

	<u>Leominster</u>						<u>Chicopee</u>					
	<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>		<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	294	100	86	100	1,793	100	316	100	31	100	1,905	100
Mother's birthplace												
United States	125	42.5	26	30.2	1,722	96.1	166	52.5	11	35.5	1,750	91.9
Puerto Rico & U.S. Territories	163	55.4	2	-- <sup>1</sup>	1	-- <sup>1</sup>	146	46.2	0	0.0	1	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	6	2.0	58	67.4	69	3.9	4	-- <sup>1</sup>	20	64.5	153	8.0
Age, in years												
<18	30	10.2	1	-- <sup>1</sup>	32	1.8	31	9.8	1	-- <sup>1</sup>	48	2.5
18-19	56	19.0	6	7.0	75	4.2	41	13.0	1	-- <sup>1</sup>	126	6.6
20-24	103	35.0	24	27.9	299	16.7	116	36.7	7	22.6	412	21.6
25-29	65	22.1	29	33.7	557	31.1	85	26.9	8	25.8	606	31.8
30-34	29	9.9	15	17.4	574	32.0	33	10.4	9	29.0	465	24.4
35-39	10	3.4	10	11.6	222	12.4	9	2.8	5	16.1	211	11.1
40+	1	-- <sup>1</sup>	1	-- <sup>1</sup>	34	1.9	1	-- <sup>1</sup>	0	0.0	37	2.0
Education completed <sup>3</sup>												
less than high school	60	28.8	14	17.7	102	6.0	81	33.2	3	-- <sup>1</sup>	159	9.2
high school	83	39.9	29	36.7	525	31.1	104	42.6	14	48.3	695	40.2
some college	58	27.9	25	31.6	570	33.8	54	22.1	11	37.9	646	37.3
college graduate	6	2.9	8	10.1	362	21.5	3	-- <sup>1</sup>	1	-- <sup>1</sup>	175	10.1
more than college	1	-- <sup>1</sup>	3	-- <sup>1</sup>	127	7.5	2	-- <sup>1</sup>	0	0.0	55	3.2
Marital status												
married	108	36.7	43	50.0	1,392	77.6	73	23.1	17	54.8	1,244	65.3
not married	186	63.3	43	50.0	401	22.4	243	76.9	14	45.2	661	34.7
Race												
White	20	6.8	16	18.6	1,793	100.0	58	18.4	9	29.0	1,905	100.0
Black	2	-- <sup>1</sup>	2	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0	0	0.0
Asian or American Indian	2	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0	0	0.0
Other	270	91.8	67	77.9	0	0.0	258	81.6	22	71.0	0	0.0
Language preference												
English	210	71.4	53	61.6	1,779	99.4	257	81.3	20	64.5	1,830	96.1
Spanish	84	28.6	29	33.7	1	-- <sup>1</sup>	58	18.4	11	35.5	1	-- <sup>1</sup>
Portuguese	0	0.0	2	-- <sup>1</sup>	4	-- <sup>1</sup>	0	0.0	0	0.0	4	-- <sup>1</sup>
Other	0	0.0	2	-- <sup>1</sup>	6	0.3	1	-- <sup>1</sup>	0	0.0	70	3.7

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.

<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



**Table B14.2 Maternal Risk Factors by Ethnicity: Leominster and Chicopee 1996-1999.**

	<u>Leominster</u>						<u>Chicopee</u>					
	<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>		<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	294	100	86	100	1,793	100	316	100	31	100	1,905	100
Parity												
1	121	41.2	25	29.1	733	40.9	98	31.0	10	32.3	787	41.3
2-3	143	48.6	50	58.1	943	52.6	165	52.2	18	58.1	968	50.8
4+	30	10.2	11	12.8	117	6.5	53	16.8	3	-- <sup>1</sup>	150	7.9
Smoking prior to pregnancy												
yes	50	17.0	10	11.6	464	25.9	82	25.9	7	22.6	688	36.1
no	244	83.0	76	88.4	1,326	74.1	234	74.1	24	77.4	1,216	63.9
Smoking during pregnancy												
yes	25	8.5	3	-- <sup>1</sup>	287	16.0	58	18.4	3	-- <sup>1</sup>	478	25.1
no	269	91.5	83	100.0	1,505	84.0	258	81.6	28	90.3	1,426	74.9
Cesarean section <sup>2</sup>												
yes	62	21.2	11	12.8	413	23.1	62	19.6	8	25.8	394	20.7
no	231	78.8	75	87.2	1,376	100.0	254	80.4	23	74.2	1,510	79.3
Maternal conditions												
anemia	9	3.1	2	-- <sup>1</sup>	14	0.8	31	9.8	0	0.0	66	3.5
hypertension <sup>3</sup>	8	2.7	1	-- <sup>1</sup>	71	4.0	9	2.8	0	0.0	64	3.4
diabetes <sup>4</sup>	9	3.1	3	-- <sup>1</sup>	54	3.0	17	5.4	3	-- <sup>1</sup>	110	5.8
hepatitis B carrier	0	0.0	1	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0	1	-- <sup>1</sup>
eclampsia	1	-- <sup>1</sup>	0	0.0	13	0.7	5	1.6	0	0.0	38	2.0
Previous preterm or small for gestational age infant												
yes	10	3.4	1	-- <sup>1</sup>	33	1.9	6	1.9	0	0.0	25	1.3
no	283	96.6	83	98.8	1,748	98.1	310	98.1	31	100.0	1,875	98.7

<sup>1</sup> Percentages based on fewer than five events are

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of

<sup>3</sup> Includes both chronic and pregnancy-related

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing

**Table B14.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Leominster and Chicopee 1996-1999.**

	<u>Leominster</u>						<u>Chicopee</u>					
	<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>		<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	294	100	86	100	1,793	100	316	100	31	100	1,905	100
Adequate prenatal care <sup>2</sup>	206	70.8	57	66.3	1,453	81.9	209	67.4	16	53.3	1,400	74.0
Payment source <sup>3</sup>												
private	108	36.7	39	45.3	1,470	82.5	49	15.5	13	41.9	1,239	65.1
public	181	61.6	45	52.3	299	16.8	261	82.6	18	58.1	637	33.5
self-paid	3	-- <sup>1</sup>	2	-- <sup>1</sup>	6	0.3	3	-- <sup>1</sup>	0	0.0	18	0.9
Site of care												
physician's office	201	68.6	59	68.6	1,460	82.3	95	30.3	16	51.6	1,446	76.3
hospital clinic	10	3.4	3	-- <sup>1</sup>	22	1.2	163	51.9	10	32.3	239	12.6
community health center	7	2.4	3	-- <sup>1</sup>	9	0.5	0	0.0	0	0.0	1	-- <sup>1</sup>
HMO/other	75	25.6	21	24.4	284	16.0	56	17.8	5	16.1	209	11.0
Breastfeeding <sup>4</sup>												
yes	189	64.3	67	77.9	1,134	63.6	157	49.7	23	74.2	1,128	59.3
no	105	35.7	19	22.1	650	36.4	159	50.3	8	25.8	775	40.7
Pediatric provider named												
yes	294	100.0	86	100.0	1,777	99.1	314	99.4	31	100.0	1,892	99.3
no	0	0.0	0	0.0	16	0.9	2	-- <sup>1</sup>	0	0.0	13	0.7

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

Table B14.4 Infant Health Characteristics by Ethnicity: Leominster and Chicopee 1996-1999.

	<u>Leominster</u>						<u>Chicopee</u>					
	<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	294	100	86	100	1,793	100	316	100	31	100	1,905	100
Birthweight (g)												
< 1,500	5	1.7	1	-- <sup>1</sup>	21	1.2	9	2.8	0	0.0	32	1.7
1,500 - 2,499	22	7.5	5	5.8	101	5.6	19	6.0	2	-- <sup>1</sup>	97	5.1
2,500 - 3,999	252	85.7	70	81.4	1,450	81.1	260	82.3	25	80.6	1,515	79.6
4,000+	15	5.1	10	11.6	216	12.1	28	8.9	4	-- <sup>1</sup>	260	13.7
Gestational age (weeks)												
< 37	30	10.3	7	8.1	145	8.1	39	12.4	3	-- <sup>1</sup>	151	7.9
37-42	262	89.7	79	91.9	1,642	91.8	276	87.6	28	90.3	1,748	92.0
43+	0	0.0	0	0.0	2	-- <sup>1</sup>	0	0.0	0	0.0	1	-- <sup>1</sup>
Singleton birth	284	96.6	84	97.7	1,737	96.9	298	94.3	31	100.0	1,835	96.3
Multiple birth	10	3.4	2	-- <sup>1</sup>	56	3.1	18	5.7	0	0.0	70	3.7
Sex of infant: female	140	47.6	44	51.2	849	47.4	148	46.8	19	61.3	911	47.8
Abnormal conditions of newborn	13	4.4	4	-- <sup>1</sup>	106	5.9	136	43.0	11	35.5	729	38.3
jaundice	5	1.7	0	0.0	38	2.1	41	13.0	3	-- <sup>1</sup>	213	11.2

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B15.1 Mother's Demographic Characteristics by Ethnicity: Salem and Southbridge 1996-1999.**

	<u>Salem</u>						<u>Southbridge</u>					
	<u>Dominican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>		<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	250	100	95	100	1,525	100	266	100	18	100	614	100
Mother's birthplace												
United States	24	9.6	44	46.3	1,422	93.4	96	36.1	5	27.8	599	97.6
Puerto Rico & U.S. Territories	1	-- <sup>1</sup>	38	40.0	1	-- <sup>1</sup>	168	63.2	0	0.0	0	0.0
Non - U.S. <sup>2</sup>	225	90.0	13	13.7	99	6.5	2	-- <sup>1</sup>	13	72.2	15	2.4
Age, in years												
<18	17	6.8	10	10.5	33	2.2	42	15.8	1	-- <sup>1</sup>	23	3.7
18-19	24	9.6	15	15.8	56	3.7	47	17.7	1	-- <sup>1</sup>	58	9.4
20-24	53	21.2	31	32.6	194	12.7	97	36.5	4	-- <sup>1</sup>	170	27.7
25-29	89	35.6	23	24.2	437	28.7	49	18.4	6	33.3	203	33.1
30-34	45	18.0	8	8.4	509	33.4	26	9.8	3	-- <sup>1</sup>	114	18.6
35-39	19	7.6	6	6.3	243	15.9	4	-- <sup>1</sup>	3	-- <sup>1</sup>	34	5.5
40+	3	-- <sup>1</sup>	2	-- <sup>1</sup>	53	3.5	1	-- <sup>1</sup>	0	0.0	12	2.0
Education completed <sup>3</sup>												
less than high school	60	28.8	19	27.1	57	4.0	71	40.1	6	37.5	70	13.1
high school	69	33.2	22	31.4	390	27.2	62	35.0	3	-- <sup>1</sup>	245	46.0
some college	54	26.0	21	30.0	465	32.4	39	22.0	3	-- <sup>1</sup>	135	25.3
college graduate	16	7.7	6	8.6	368	25.6	4	-- <sup>1</sup>	3	-- <sup>1</sup>	63	11.8
more than college	9	4.3	2	-- <sup>1</sup>	155	10.8	1	-- <sup>1</sup>	1	-- <sup>1</sup>	20	3.8
Marital status												
married	106	42.4	29	30.5	1,121	73.5	64	24.1	12	66.7	391	63.7
not married	144	57.6	66	69.5	404	26.5	202	75.9	6	33.3	223	36.3
Race												
White	4	-- <sup>1</sup>	13	13.7	1,525	100.0	7	2.6	3	-- <sup>1</sup>	614	100.0
Black	2	-- <sup>1</sup>	3	-- <sup>1</sup>	0	0.0	1	-- <sup>1</sup>	1	-- <sup>1</sup>	0	0.0
Asian or American Indian	0	0.0	0	0.0	0	0.0	1	-- <sup>1</sup>	0	0.0	0	0.0
Other	244	97.6	79	83.2	0	0.0	257	96.6	14	77.8	0	0.0
Language preference												
English	105	42.0	74	77.9	1,500	98.7	176	66.2	12	66.7	611	99.5
Spanish	143	57.2	19	20.0	0	0.0	90	33.8	6	33.3	0	0.0
Portugese	0	0.0	0	0.0	4	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0
Other	2	-- <sup>1</sup>	2	-- <sup>1</sup>	15	1.0	0	0.0	0	0.0	3	-- <sup>1</sup>

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.

<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B15.2 Maternal Risk Factors by Ethnicity: Salem and Southbridge 1996-1999.**

	<u>Salem</u>						<u>Southbridge</u>					
	<u>Dominican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>		<u>Puerto Rican</u>		<u>Other Hispanic</u>		<u>White Non-Hispanic</u>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	250	100	95	100	1,525	100	266	100	18	100	614	100
Parity												
1	92	36.8	39	41.1	742	48.7	108	40.6	5	27.8	279	45.4
2-3	134	53.6	41	43.2	707	46.4	133	50.0	10	55.6	291	47.4
4+	24	9.6	15	15.8	76	5.0	25	9.4	3	-- <sup>1</sup>	44	7.2
Smoking prior to pregnancy												
yes	14	5.6	24	25.3	424	28.0	60	22.6	4	-- <sup>1</sup>	229	37.3
no	236	94.4	71	74.7	1,092	72.0	206	77.4	14	77.8	385	62.7
Smoking during pregnancy												
yes	7	2.8	13	13.7	258	17.0	33	12.4	3	-- <sup>1</sup>	159	25.9
no	243	97.2	82	86.3	1,263	83.0	233	87.6	15	83.3	455	74.1
Cesarean section <sup>2</sup>												
yes	48	19.2	12	12.6	321	21.1	49	18.5	6	33.3	117	19.1
no	202	80.8	83	87.4	1,203	78.9	216	81.5	12	66.7	494	80.9
Maternal conditions												
anemia	0	0.0	1	-- <sup>1</sup>	13	0.9	9	3.4	0	0.0	10	1.6
hypertension <sup>3</sup>	1	-- <sup>1</sup>	0	0.0	22	1.4	13	4.9	1	-- <sup>1</sup>	41	6.7
diabetes <sup>4</sup>	5	2.0	1	-- <sup>1</sup>	26	1.7	12	4.5	1	-- <sup>1</sup>	22	3.6
hepatitis B carrier	0	0.0	0	0.0	0	0.0	2	-- <sup>1</sup>	1	-- <sup>1</sup>	2	-- <sup>1</sup>
eclampsia	1	-- <sup>1</sup>	0	0.0	16	1.1	0	0.0	0	0.0	2	-- <sup>1</sup>
Previous preterm or small for gestational age infant												
yes	2	-- <sup>1</sup>	1	-- <sup>1</sup>	9	0.6	23	8.7	1	-- <sup>1</sup>	19	3.1
no	248	99.2	94	98.9	1,514	99.4	242	91.3	17	94.4	592	96.9

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B15.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Salem and Southbridge 1996-1999.**

	<u>Salem</u>						<u>Southbridge</u>					
	<b>Dominican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	250	100	95	100	1,525	100	266	100	18	100	614	100
Adequate prenatal care <sup>2</sup>	175	70.0	75	78.9	1,270	84.1	196	74.2	10	55.6	509	83.0
Payment source <sup>3</sup>												
private	45	18.0	28	29.5	1,104	72.9	81	30.6	10	55.6	394	64.3
public	196	78.4	67	70.5	327	21.6	175	66.0	8	44.4	214	34.9
self-paid	0	0.0	0	0.0	6	0.4	8	3.0	0	0.0	3	-- <sup>1</sup>
Site of care												
physician's office	170	68.0	59	62.1	1,279	84.2	245	92.8	15	83.3	532	87.4
hospital clinic	53	21.2	24	25.3	107	7.0	6	2.3	0	0.0	20	3.3
community health center	15	6.0	9	9.5	22	1.4	3	-- <sup>1</sup>	0	0.0	3	-- <sup>1</sup>
HMO/other	12	4.8	3	-- <sup>1</sup>	111	7.3	10	3.8	3	-- <sup>1</sup>	54	8.9
Breastfeeding <sup>4</sup>												
yes	208	83.2	66	69.5	962	63.4	175	66.0	15	83.3	378	61.7
no	42	16.8	29	30.5	555	36.6	90	34.0	3	-- <sup>1</sup>	235	38.3
Pediatric provider named												
yes	248	99.2	95	100.0	1,495	98.0	262	98.5	18	100.0	608	99.0
no	2	-- <sup>1</sup>	0	0.0	30	2.0	4	-- <sup>1</sup>	0	0.0	6	1.0

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B15.4 Infant Health Characteristics by Ethnicity: Salem and Southbridge 1996-1999.**

	<u>Salem</u>						<u>Southbridge</u>					
	<b>Dominican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Puerto Rican</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	250	100	95	100	1,525	100	266	100	18	100	614	100
Birthweight (g)												
< 1,500	4	-- <sup>1</sup>	1	-- <sup>1</sup>	22	1.4	4	-- <sup>1</sup>	0	0.0	13	2.1
1,500 - 2,499	14	5.6	4	-- <sup>1</sup>	92	6.0	16	6.0	1	-- <sup>1</sup>	36	5.9
2,500 - 3,999	208	83.2	83	87.4	1,208	79.3	226	85.3	15	83.3	506	82.4
4,000+	24	9.6	7	7.4	201	13.2	19	7.2	2	-- <sup>1</sup>	59	9.6
Gestational age (weeks)												
< 37	19	7.6	10	10.5	126	8.3	25	9.4	1	--	54	8.8
37-42	231	92.4	85	89.5	1,395	91.6	240	90.6	17	94.4	560	91.2
43+	0	0.0	0	0.0	2	-- <sup>1</sup>	0	0.0	0	0.0	0	0.0
Singleton birth	246	98.4	95	100.0	1,471	96.5	266	100.0	18	100.0	601	97.9
Multiple birth	4	-- <sup>1</sup>	0	0.0	54	3.5	0	0.0	0	0.0	13	2.1
Sex of infant: female	125	50.0	51	53.7	759	49.8	124	46.6	6	33.3	293	47.7
Abnormal conditions of newborn	2	-- <sup>1</sup>	3	-- <sup>1</sup>	85	5.6	66	24.8	7	38.9	132	21.5
jaundice	1	-- <sup>1</sup>	1	-- <sup>1</sup>	26	1.7	20	7.5	3	-- <sup>1</sup>	55	9.1

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B16.1 Mother's Demographic Characteristics by Ethnicity: Everett and Cambridge 1996-1999.**

	<u>Everett</u>						<u>Cambridge</u>			
	<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	153	100	126	100	1,428	100	367	100	2,344	100
Mother's birthplace										
United States	5	3.3	36	28.6	1,208	84.7	77	21.0	1,761	75.1
Puerto Rico & U.S. Territories	0	0.0	11	8.7	0	0.0	42	11.5	2	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	148	96.7	79	62.7	218	15.3	247	67.5	581	24.8
Age, in years										
<18	7	4.6	7	5.6	23	1.6	15	4.1	10	0.4
18-19	10	6.5	10	7.9	51	3.6	25	6.8	36	1.5
20-24	43	28.1	23	18.3	236	16.5	74	20.2	156	6.7
25-29	40	26.1	24	19.0	468	32.8	99	23.1	483	20.6
30-34	39	25.5	35	27.8	411	28.8	112	22.1	849	36.2
35-39	13	8.5	26	20.6	209	14.6	38	6.6	601	25.6
40+	1	-- <sup>1</sup>	1	-- <sup>1</sup>	30	2.1	4	-- <sup>1</sup>	209	9.8
Education completed <sup>3</sup>										
less than high school	78	57.8	18	16.7	132	9.8	61	18.7	66	2.9
high school	35	25.9	38	35.2	579	42.8	78	23.9	238	10.4
some college	16	11.9	31	28.7	410	30.3	68	20.8	271	11.8
college graduate	6	4.4	21	19.4	183	13.5	43	13.1	724	31.5
more than college	0	0.0	0	0.0	49	3.6	77	23.5	998	43.4
Marital status										
married	76	49.7	74	58.7	1,023	71.7	212	57.9	2,064	88.1
not married	77	50.3	52	41.3	403	28.3	154	42.1	279	11.9
Race										
White	11	7.2	27	21.4	1,428	100.0	42	11.4	2,344	100.0
Black	0	0.0	3	-- <sup>1</sup>	0	0.0	6	1.6	0	0.0
Asian or American Indian	0	0.0	2	-- <sup>1</sup>	0	0.0	3	-- <sup>1</sup>	0	0.0
Other	142	92.8	94	74.6	0	0.0	316	86.1	0	0.0
Language preference										
English	27	17.6	68	54.0	1,297	91.1	158	43.3	2,142	92.5
Spanish	126	82.4	52	41.3	0	0.0	202	55.3	10	0.4
Portugese	0	0.0	5	4.0	108	7.6	0	0.0	53	2.3
Other	0	0.0	1	-- <sup>1</sup>	18	1.3	5	1.4	110	4.8

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.



**Table B16.2 Maternal Risk Factors by Ethnicity: Everett and Cambridge 1996-1999.**

	<u>Everett</u>						<u>Cambridge</u>			
	<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	153	100	126	100	1,428	100	367	100	2,344	100
Parity										
1	57	37.3	53	42.1	706	49.4	165	45.0	1,434	61.2
2-3	81	52.9	67	53.2	630	44.1	175	47.7	867	37.0
4+	15	9.8	6	4.8	92	6.4	27	7.4	43	1.8
Smoking prior to pregnancy										
yes	1	-- <sup>1</sup>	13	10.3	483	33.9	33	9.1	229	9.9
no	151	99.3	113	89.7	940	66.1	331	90.9	2,082	90.1
Smoking during pregnancy										
yes	0	0.0	6	4.8	310	21.7	16	4.4	133	5.7
no	152	100.0	120	95.2	1,116	78.3	350	95.6	2,206	94.3
Cesarean section <sup>2</sup>										
yes	24	15.7	23	18.3	362	25.4	76	20.8	443	19.0
no	129	84.3	103	81.7	1,066	74.6	289	79.2	1,887	81.0
Maternal conditions										
anemia	10	6.5	0	0.0	29	2.0	17	4.7	27	1.2
hypertension <sup>3</sup>	3	-- <sup>1</sup>	6	4.8	61	4.3	12	3.3	90	3.9
diabetes <sup>4</sup>	8	5.2	4	-- <sup>1</sup>	73	5.1	11	3.0	52	2.2
hepatitis B carrier	0	0.0	0	0.0	2	-- <sup>1</sup>	2	-- <sup>1</sup>	3	-- <sup>1</sup>
eclampsia	0	0.0	2	-- <sup>1</sup>	10	0.7	3	-- <sup>1</sup>	14	0.6
Previous preterm or small for gestational age infant										
yes	0	0.0	1	-- <sup>1</sup>	16	1.1	2	-- <sup>1</sup>	9	0.4
no	153	100.0	124	99.2	1,409	98.9	362	99.5	2,314	99.6

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B16.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Everett and Cambridge 1996-1999.**

	<u>Everett</u>						<u>Cambridge</u>			
	<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	153	100	126	100	1,428	100	367	100	2,344	100
Adequate prenatal care <sup>2</sup>	91	60.7	82	65.6	1,143	81.6	269	74.7	1,957	85.8
Payment source <sup>3</sup>										
private	49	32.0	66	52.4	974	68.9	210	58.0	2,042	88.8
public	101	66.0	52	41.3	412	29.2	144	39.8	207	9.0
self-paid	1	-- <sup>1</sup>	4	-- <sup>1</sup>	15	1.1	7	1.9	36	1.6
Site of care										
physician's office	12	7.9	40	32.0	897	63.6	126	34.7	1,346	57.9
hospital clinic	47	30.9	35	28.0	261	18.5	104	28.7	445	19.1
community health center	78	51.3	34	27.2	122	8.7	88	24.2	120	5.2
HMO/other	15	9.9	16	12.8	130	9.2	45	12.4	415	17.8
Breastfeeding <sup>4</sup>										
yes	130	85.0	97	77.0	726	51.3	330	91.2	2,047	88.7
no	23	15.0	29	23.0	689	48.7	32	8.8	260	11.3
Pediatric provider named										
yes	140	91.5	107	84.9	1,373	96.1	341	92.9	2,219	94.7
no	13	8.5	19	15.1	55	3.9	26	7.1	125	5.3

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B16.4 Infant Health Characteristics by Ethnicity: Everett and Cambridge 1996-1999.**

	<u>Everett</u>						<u>Cambridge</u>			
	<b>Central American</b>		<b>Other Hispanic</b>		<b>White Non-Hispanic</b>		<b>Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of births	153	100	126	100	1,428	100	367	100	2,344	100
Birthweight (g)										
< 1,500	2	-- <sup>1</sup>	1	-- <sup>1</sup>	24	1.7	1	-- <sup>1</sup>	27	1.2
1,500 - 2,499	6	3.9	6	4.8	83	5.8	19	5.2	118	5.0
2,500 - 3,999	134	87.6	105	83.3	1,134	79.6	317	86.6	1,887	80.6
4,000+	11	7.2	14	11.1	183	12.9	29	7.9	309	13.2
Gestational age (weeks)										
< 37	12	7.8	8	6.3	99	7.0	18	4.9	147	6.3
37-42	141	92.2	117	92.9	1,307	92.5	345	94.8	2,183	93.4
43+	0	0.0	1	-- <sup>1</sup>	7	0.5	1	-- <sup>1</sup>	7	0.3
Singleton birth	147	96.1	126	100.0	1,371	96.0	352	95.9	2,216	94.5
Multiple birth	6	3.9	0	0.0	57	4.0	15	4.1	128	5.5
Sex of infant: female	69	45.1	62	49.2	684	47.9	164	44.7	1,122	47.9
Abnormal conditions of newborn	12	7.8	8	6.3	84	5.9	33	9.0	196	8.4
jaundice	6	4.0	3	-- <sup>1</sup>	24	1.7	12	3.3	73	3.1

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B17.1 Mother's Demographic Characteristics by Ethnicity: Revere and Marlborough 1996-1999.**

	<u>Revere</u>				<u>Marlborough</u>			
	Hispanic		White Non-Hispanic		Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	326	100	1,633	100	257	100	1,732	100
Mother's birthplace								
United States	61	18.8	1,419	87.1	42	16.4	1,568	90.8
Puerto Rico & U.S. Territories	14	4.3	0	0.0	27	10.5	1	-- <sup>1</sup>
Non - U.S. <sup>2</sup>	250	76.9	211	12.9	187	73.0	158	9.1
Age, in years								
<18	18	5.5	25	1.5	24	9.3	21	1.2
18-19	23	7.1	58	3.6	28	10.9	43	2.5
20-24	84	25.8	252	15.4	73	28.4	182	10.5
25-29	90	27.6	550	33.7	73	20.4	493	28.5
30-34	74	22.7	497	30.4	37	8.7	628	36.3
35-39	29	8.9	213	13.0	22	5.0	322	18.6
40+	8	2.5	38	2.3	0	0.0	43	2.5
Education completed <sup>3</sup>								
less than high school	82	28.9	101	6.5	101	49.3	57	3.4
high school	99	34.9	687	44.4	66	32.2	459	27.5
some college	65	22.9	510	32.9	19	9.3	407	24.4
college graduate	30	10.6	195	12.6	10	4.9	563	33.8
more than college	8	2.8	56	3.6	9	4.4	182	10.9
Marital status								
married	180	55.2	1,148	70.3	119	46.3	1,439	83.1
not married	146	44.8	485	29.7	138	53.7	293	16.9
Race								
White	55	16.9	1,633	100.0	60	23.3	1,732	100.0
Black	2	-- <sup>1</sup>	0	0.0	2	-- <sup>1</sup>	0	0.0
Asian or American Indian	5	1.5	0	0.0	0	0.0	0	0.0
Other	264	81.0	0	0.0	195	75.9	0	0.0
Language preference								
English	125	38.3	1,543	94.8	106	41.2	1,683	97.2
Spanish	192	58.9	1	-- <sup>1</sup>	145	56.4	3	-- <sup>1</sup>
Portuguese	6	1.8	34	2.1	5	1.9	38	2.2
Other	3	-- <sup>1</sup>	49	3.0	1	-- <sup>1</sup>	7	0.4

<sup>1</sup> Percentages based on fewer than five events are excluded.<sup>2</sup> Outside of the United States, Puerto Rico, and U.S. Territories.<sup>3</sup> Women 20 years of age and older.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B17.2 Maternal Risk Factors by Ethnicity: Revere and Marlborough 1996-1999.**

	<u>Revere</u>				<u>Marlborough</u>			
	Hispanic		White Non-Hispanic		Hispanic		White Non-Hispanic	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	326	100	1,633	100	257	100	1,732	100
Parity								
1	150	46.0	777	47.6	110	42.8	966	55.8
2-3	146	44.8	766	46.9	113	44.0	693	40.0
4+	30	9.2	90	5.5	34	13.2	73	4.2
Smoking prior to pregnancy								
yes	26	8.0	535	32.9	16	6.2	301	17.4
no	300	92.0	1,090	67.1	241	93.8	1,428	82.6
Smoking during pregnancy								
yes	15	4.6	347	21.3	10	3.9	183	10.6
no	311	95.4	1,285	78.7	247	96.1	1,547	89.4
Cesarean section <sup>2</sup>								
yes	72	22.1	393	24.1	56	21.9	355	20.6
no	254	77.9	1,238	75.9	200	78.1	1,368	79.4
Maternal conditions								
anemia	14	4.3	36	2.2	2	-- <sup>1</sup>	8	0.5
hypertension <sup>3</sup>	7	2.2	55	3.4	4	-- <sup>1</sup>	56	3.3
diabetes <sup>4</sup>	13	4.0	90	5.5	2	-- <sup>1</sup>	39	2.3
hepatitis B carrier	1	-- <sup>1</sup>	7	0.4	0	0.0	0	0.0
eclampsia	2	-- <sup>1</sup>	10	0.6	1	-- <sup>1</sup>	10	0.6
Previous preterm or small for gestational age infant								
yes	1	-- <sup>1</sup>	11	0.7	2	-- <sup>1</sup>	10	0.6
no	323	99.7	1,618	99.3	253	99.2	1,698	99.4

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Includes both primary and repeat Cesarean sections. Excludes those with unknown mode of delivery.

<sup>3</sup> Includes both chronic and pregnancy-related hypertension.

<sup>4</sup> Includes both gestational and other diabetes.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B17.3 Prenatal and Postnatal Care Characteristics of Mothers by Ethnicity: Revere and Marlborough 1996-1999.**

	<u><b>Revere</b></u>				<u><b>Marlborough</b></u>			
	<b>Hispanic</b>		<b>White Non-Hispanic</b>		<b>Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	326	100	1,633	100	257	100	1,732	100
Adequate prenatal care <sup>2</sup>	210	66.0	1,253	77.8	175	69.2	1,474	85.6
Payment source <sup>3</sup>								
private	123	37.8	1,065	65.7	91	35.4	1,476	85.5
public	185	56.9	505	31.1	150	58.4	217	12.6
self-paid	8	2.5	23	1.4	7	2.7	12	0.7
Site of care								
physician's office	64	19.7	924	57.4	235	91.8	1,582	92.9
hospital clinic	66	20.3	273	16.9	7	2.7	38	2.2
community health center	176	54.2	302	18.7	3	-- <sup>1</sup>	3	-- <sup>1</sup>
HMO/other	19	5.8	112	7.0	11	4.3	80	4.7
Breastfeeding <sup>4</sup>								
yes	267	82.4	842	52.2	221	86.0	1,488	86.2
no	57	17.6	771	47.8	36	14.0	239	13.8
Pediatric provider named								
yes	296	90.8	1,535	94.0	255	99.2	1,694	97.8
no	30	9.2	98	6.0	2	-- <sup>1</sup>	38	2.2

<sup>1</sup> Percentages based on fewer than five events are excluded.

<sup>2</sup> Adequate prenatal care: See technical notes for definition of adequacy of care.

<sup>3</sup> Payment source:

Private = Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance

Public = Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care

Self-paid= Self-pay

<sup>4</sup> Mother was breastfeeding or was intending to breastfeed as the time the birth certificate was completed.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

**Table B17.4 Infant Health Characteristics by Ethnicity: Revere and Marlborough 1996-1999.**

	<u>Revere</u>				<u>Marlborough</u>			
	<b>Hispanic</b>		<b>White Non-Hispanic</b>		<b>Hispanic</b>		<b>White Non-Hispanic</b>	
	Number	Percent <sup>1</sup>	Number	Percent	Number	Percent	Number	Percent
Number of births	326	100	1,633	100	257	100	1,732	100
Birthweight (g)								
< 1,500	3	-- <sup>1</sup>	29	1.8	0	0.0	19	1.1
1,500 - 2,499	16	4.9	110	6.8	11	4.3	64	3.7
2,500 - 3,999	272	83.4	1,307	80.2	231	89.9	1,430	82.7
4,000+	35	10.7	183	11.2	15	5.8	217	12.5
Gestational age (weeks)								
< 37	15	4.6	145	9.0	8	3.1	86	5.0
37-42	308	94.8	1,469	90.7	248	96.5	1,641	94.9
43+	2	-- <sup>1</sup>	5	0.3	1	-- <sup>1</sup>	3	-- <sup>1</sup>
Singleton birth	318	97.5	1,549	94.9	253	98.4	1,663	96.0
Multiple birth	8	2.5	84	5.1	4	-- <sup>1</sup>	69	4.0
Sex of infant: female	167	51.2	793	48.6	139	54.1	869	50.2
Abnormal conditions of newborn jaundice	31	9.5	106	6.5	17	6.6	151	8.7
	17	5.2	23	1.4	6	2.4	52	3.0

<sup>1</sup> Percentages based on fewer than five events are excluded.

Note: Percentages may not add to 100% due to missing values. Percentages are calculated based only on those births with known values for the characteristic of interest.

Total numbers for individual characteristics may not equal totals for a particular ethnic group due to missing values.

## **APPENDIX II**

### **TECHNICAL NOTES**



## Technical Notes

### Limitations of small numbers:

**Cells in some tables in this publication, and particularly those tables specific to the individual cities and towns, contain small numbers and are suppressed in accordance with the guidelines set forth by the MDPH-BHSR&E for suppression of confidential data. Proportions based upon less than five observations are suppressed, and trends based upon small numbers should be interpreted cautiously.**

### Self-reported data

Many items used in this publication, such as maternal smoking and type of health insurance coverage, are self-reported, and are subject to the usual limitations of this type of information.

### Assignment of an Infant's Race/Ethnicity

Prior to 1989, the race/ethnicity of an infant was assigned by combining information on the race/ethnicity of the mother and the race/ethnicity of the father. Since 1989, Massachusetts has followed the recommendation of the National Center for Health Statistics of classifying births according to the self-reported race/ethnicity of the mother. Therefore, beginning in 1989, the race/ethnicity of an infant is identical to the self-reported race/ethnicity of the infant's mother. Beginning in 1996, the list of ethnic categories on the birth certificate was modified. The categories used for analysis in this report are: Puerto Rican, Dominican, Mexican, Cuban, Colombian, Salvadoran, Other Central American, Other South American, and Other Hispanic.

This report utilizes the Ancestry/Ethnicity field from the birth certificate. The actual question on the birth certificate reads: "Please check *one* box which you feel best describes the mother's ancestry". A list of 42 ancestry groups is available from which to choose. Note that the ancestry question is separate from the question regarding the mother's race. The race variable was not used to identify mothers for inclusion in this report; women of the 9 Hispanic ancestries included in this report can be of any race (White, Black, Asian, American Indian or Other).

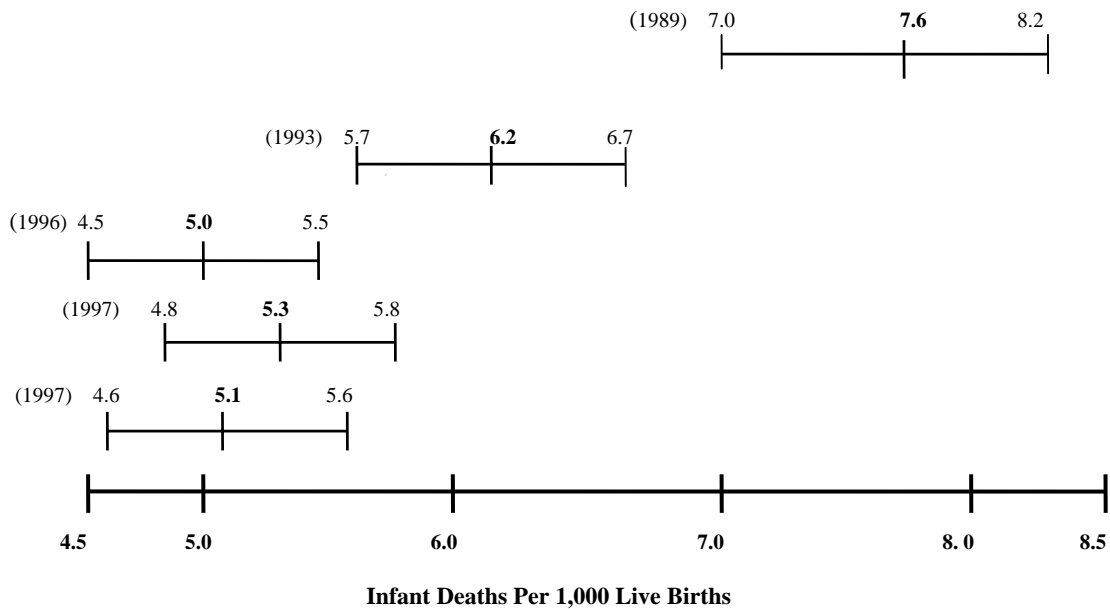
### Confidence Intervals and Infant Mortality Rates

The confidence interval (CI) provides a measure of stability of the IMR and a basis for comparing rates to determine if they are statistically different. Rates can be compared for the same group in different years, or for different groups in the same year. The width of the CI reflects the stability of the IMR. For example, a narrow CI reflects high stability, and a wide interval reflects low stability. If the CIs around two IMRs being compared do not overlap, the difference between the two rates is statistically significant. The following table and chart illustrate the concept of statistically significant differences using actual data from 1989 and 1992-1998.

## CONFIDENCE INTERVALS AND INFANT MORTALITY RATES

**Comparison of Infant Mortality Rates and Confidence Intervals for Selected Years**

<b>Year</b>	<b>IMR (per 1,000 births)</b>	<b>95% Confidence Interval</b>
1989	7.6	(7.0-8.2)
1992	6.5	(6.0-7.0)
1993	6.2	(5.7-6.7)
1994	6.0	(5.4-6.5)
1995	5.1	(4.6-5.6)
1996	5.0	(4.5-5.5)
1997	5.3	(4.8-5.8)
1998	5.1	(4.6-5.6)



The difference between the 1993 IMR and 1996 IMR is statistically significant -- the confidence intervals do not overlap. The same is true for the differences between the 1989 IMR and the annual IMRs for 1993, 1996, 1997, and 1998.

## Glossary

### Abnormal Conditions

If at least one condition is recorded on the birth certificate from the following list: Acidosis, Anemia, Congenital infection, Cyanosis, Erb's Palsy, or other birth trauma, Fetal Alcohol Syndrome, Hyaline Membrane Disease /RDS, Hypotonia, Hypoxia, Intracranial hemorrhage, Jaundice, Meconium aspiration syndrome, Positive toxicology screen, seizures, sepsis, tachypnea or other abnormal conditions.

### Anemia

Hemoglobin level of less than 13.0g/dL, or a hemocrit of less than 39%.

### Adequacy of Prenatal Care

The Index of Adequacy of Prenatal Care (based on the Kessner Index) has five categories (adequate, intermediate, inadequate, no prenatal care, and unknown), based on the trimester in which prenatal care began and the number of prenatal visits. It is a quantitative measure and is not a measure of quality of care. The general classification scheme for full-term infants is as follows:

Category	Trimester Care Began	Number of Visits
Adequate	1	9 or more
Intermediate	1	5-8
	2	5 or more
	3	1 or more
Inadequate	1	1-4
	2	1-4
	3	1 or more
No prenatal care	--	0
Unknown	Unknown	unknown

This classification is adjusted for gestational age to allow for proper classification of premature births.

### Birthweight

The weight of an infant recorded at the time of delivery. It may be recorded in either pounds/ounces or grams. If recorded in pounds/ounces, it is converted to grams for use in this report.

1 pound = 453.6 grams

1,000 grams = 2 pounds and 3 ounces

### Birthweight Categories

Low birthweight (LBW): An infant's weight of less than 2,500 grams (5.5 pounds) recorded at birth.

Very low birthweight (VLBW): An infant's weight of less than 1,500 grams (3.3 pounds) recorded at birth.

### Breastfeeding

Mother was or was intending to breastfeed at the time the birth certificate was completed.

### Cesarean Section or C-Section

Primary: A mother's first Cesarean section delivery.

Repeat: A Cesarean delivery that has been preceded by at least one Cesarean delivery.

### Cesarean Section Rates

Total C-section rate =  $\frac{\text{Number of C-section births}}{\text{Number of births}} \times 100$

### Continental U.S.-Born

Born in the continental United States (50 states or DC) not including women born in Puerto Rico, the Virgin Islands, or Guam.

### Diabetes

Metabolic disorder characterized by excessive discharge of urine and persistent thirst; includes juvenile onset, adult onset, and gestational diabetes during pregnancy.

### Early Gestational Age or Preterm

Infants born before the mother completed the 37<sup>th</sup> week of pregnancy.

### Eclampsia

A medical condition that affects women during or shortly after pregnancy. The condition may involve hypertension, edema, proteinuria, convulsions and coma.

### Education

The number of years of education completed is provided by the mother on the birth certificate by the mother. The analysis of education presented in this report is limited to women 20 years of age and older.

### Ethnicity

See the section in the Technical Notes titled: Assignment of an Infant's Race/Ethnicity

### Gestational Age

Gestational age refers to the number of weeks the infant was in utero. Infants born before the mother completed the 37th week of pregnancy are considered early gestational age or preterm.

### HMO

Health Maintenance Organization

### Healthy Start

A Massachusetts-funded program providing services and financing for prenatal care to low-income pregnant women who lack health insurance, but do not qualify for Medicaid.

### Hepatitis B Carrier

An individual with ongoing evidence of infection with hepatitis B virus, as determined by the presence of hepatitis B surface antigen in the blood, likely to be more than six months after an acute episode of hepatitis B virus infection.

### Hypertension

This includes both chronic and pregnancy-related hypertension or high blood pressure.

### Jaundice

A syndrome characterized by high levels of bilirubin (a bilirubin count greater than 10) and a yellowing of the patient's skin.

### Language Preference

Information on the mother's language preference is collected from the mother at the time of birth, based on the birth certificate question, "In what language does the mother prefer to read or discuss health-related materials?"

### Live Birth

A live birth is any infant who breathes or shows any other evidence of life (such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles) after separation from the mother's uterus, regardless of the duration of gestation.

### Low Birthweight (LBW)

See Birthweight Categories.

### MISER

MISER is the acronym for the Massachusetts Institute for Social and Economic Research. MISER, which is the official state data center for the U.S. Census, generates the current population data for the number of Massachusetts residents.

### NCHS

National Center for Health Statistics (U.S. Department of Health and Human Services, Centers for Disease Control and Prevention).

### Non-continental U.S.-born

Born outside of the continental United States, including women born in Puerto Rico, the Virgin Islands, Guam and all other countries.

#### Pediatric Provider

Information is collected from the following item on the birth certificate: 'Pediatric Provider- Individual Practitioner's Name'.

#### Private Insurance

Commercial indemnity plan, commercial managed care (HMO, PPO/IPP/IPA, and other), or other private insurance.

#### Public Insurance

Government programs including Commonhealth, Healthy Start, Medicaid/MassHealth, and Medicare (may also be HMO or managed care), or free care.

#### Occurrence Birth

A birth occurring in the Commonwealth of Massachusetts, regardless of the residency of the mother. For individual cities/towns, an occurrence birth represents any birth occurring in that city/town, regardless of the residence of the mother. See Resident Birth.

#### Parity

The total number of live infants ever born to a woman, including the current birth.

#### Plurality

The number of births to a woman produced in the same gestational period. A singleton is the birth of one infant, twins represent the births of two infants, etc.

#### Race

See the section in the Technical Notes titled: Assignment of an Infant's Race/Ethnicity

#### Resident Birth

The birth of an infant whose mother reports her usual place of residence is in Massachusetts. In Massachusetts, a resident is a person with a permanent address in one of the 351 cities or towns. Vital statistics data may be presented in terms either of residence or occurrence. All data in this publication are resident data. Resident data include all events that occur to residents of the Commonwealth, wherever they occur. Occurrence data include all events that occur within the state, whether to residents or nonresidents. There is an exchange agreement among the 50 states, District of Columbia, Puerto Rico, Virgin Islands, Guam, and Canada that provides for exchange of copies of birth and death records. These records are used for statistical purposes only, and allow each state or province to track the births and deaths of its residents.

#### Small for Gestational Age

The measurement of "small for gestational age" refers to the weight of the infant after taking into consideration the number of completed weeks of pregnancy.

#### Smoking

Information on smoking status, both before pregnancy and during pregnancy, is provided on the birth certificate by the mother.

Very Low Birthweight (VLBW)  
See Birthweight Categories.